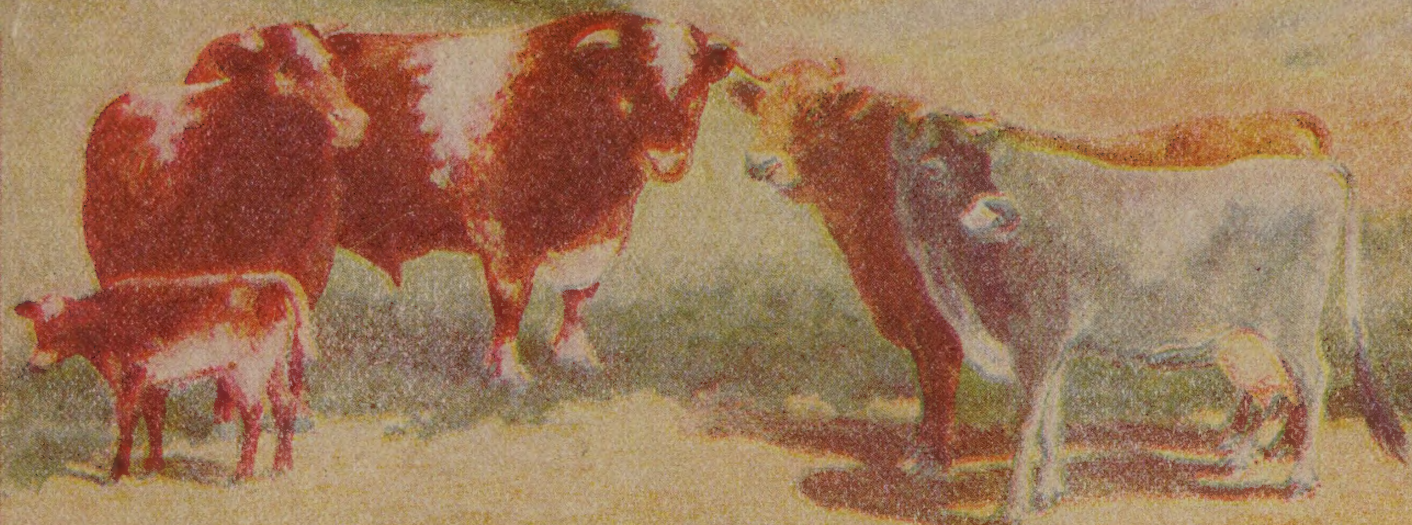
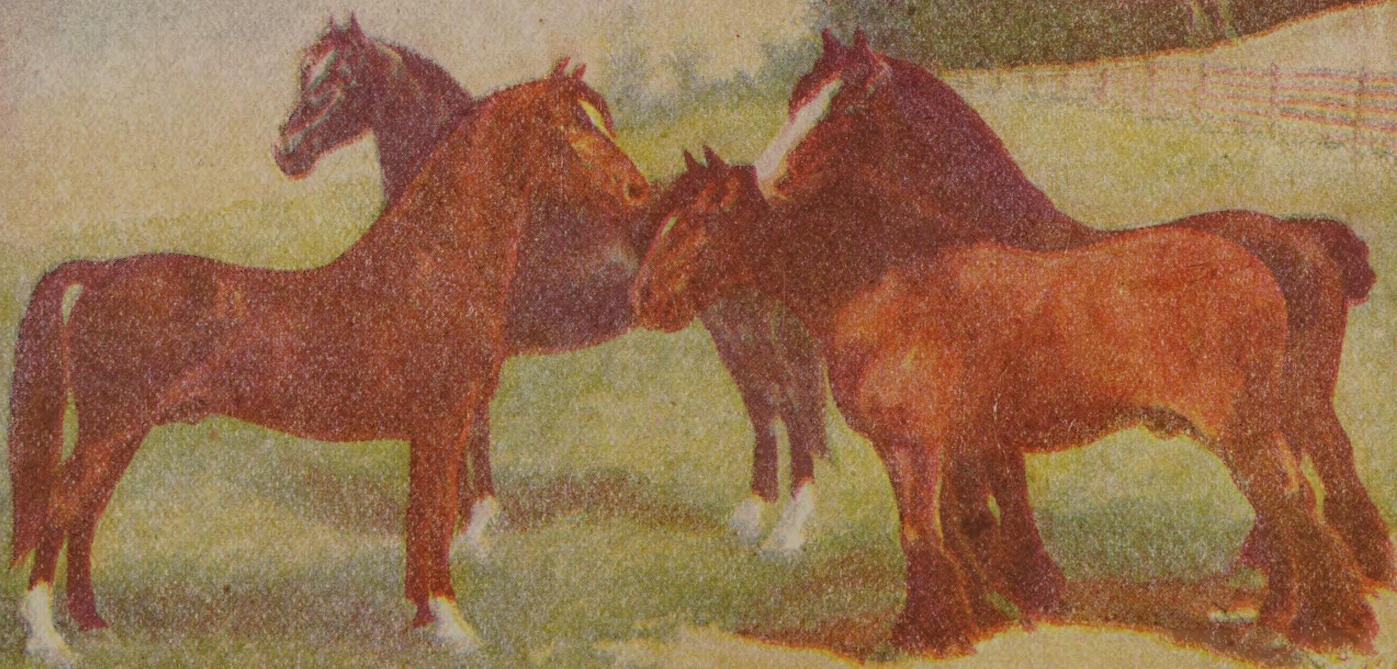
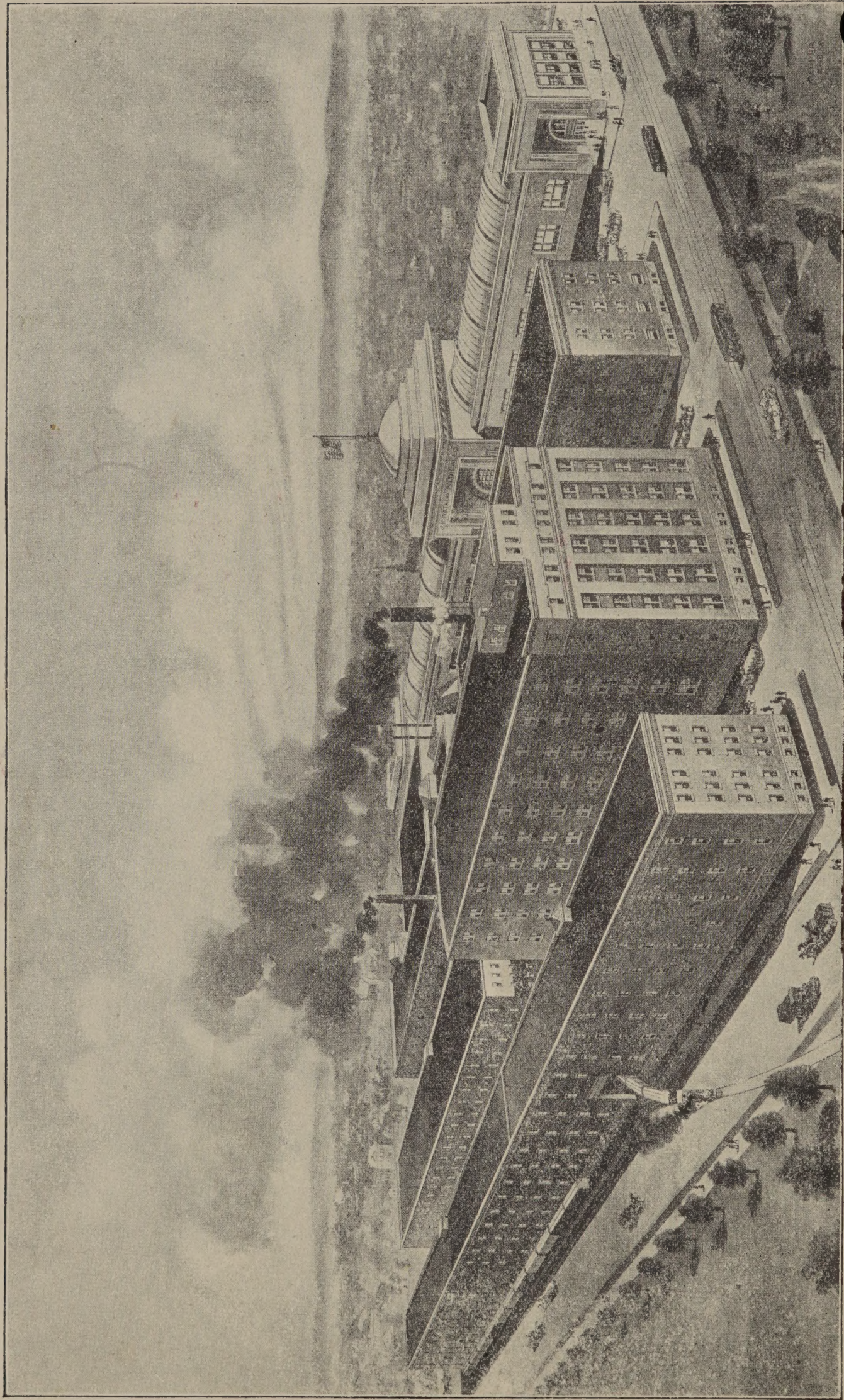




WATKINS' STOCK RAISERS' MANUAL





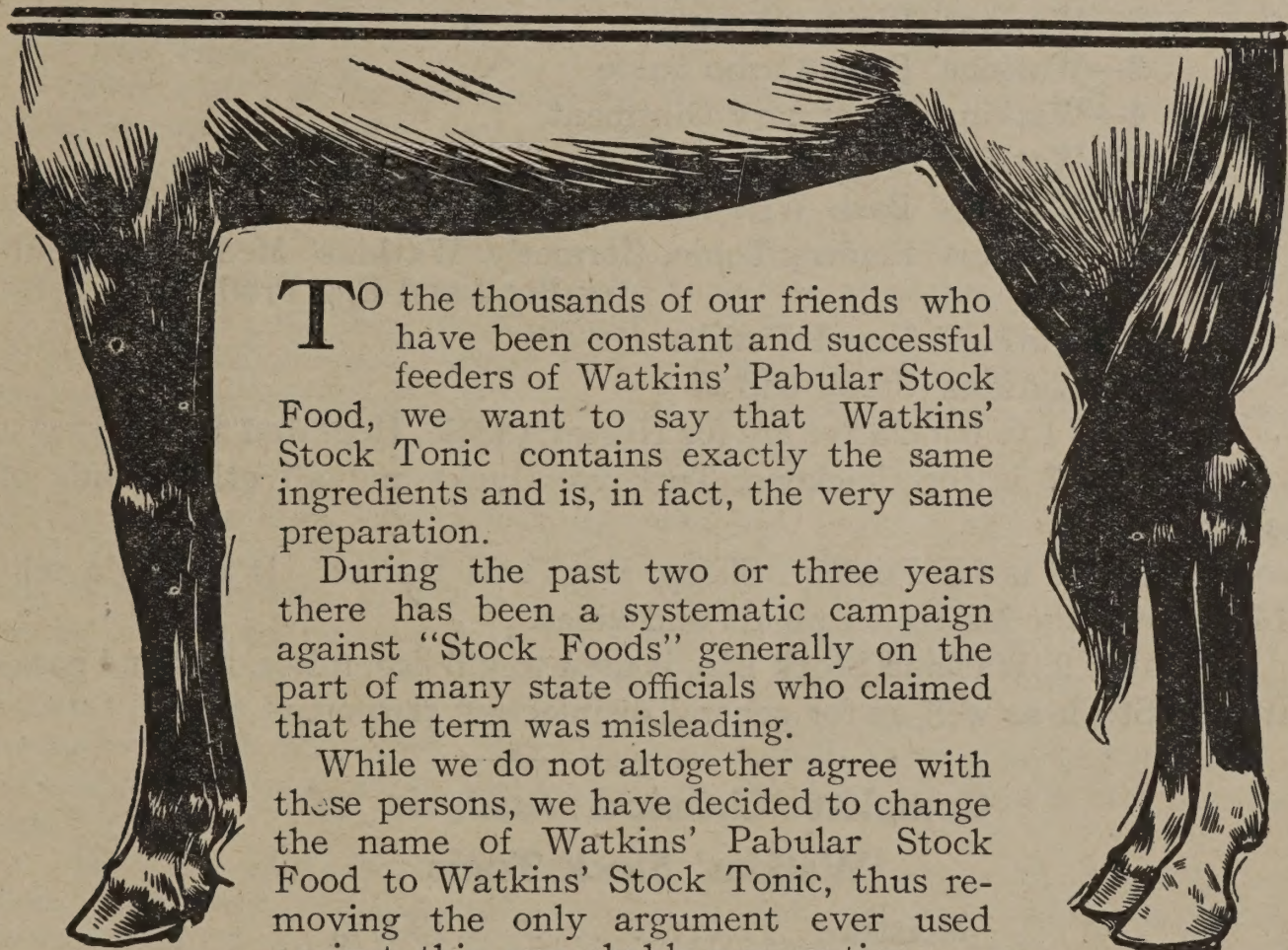
THE WATKINS PLANT AND ADMINISTRATION BUILDING. THIRD, FOURTH, CHESTNUT AND LIBERTY STREETS

Over 10 acres of floor space. The Bottle Warehouse (not shown above) immediately adjoining on Second street. Holds 100 carloads of bottles.

Our New Name

WATKINS' STOCK TONIC

Formerly Sold as Watkins' Pabular Stock Food



TO the thousands of our friends who have been constant and successful feeders of Watkins' Pabular Stock Food, we want to say that Watkins' Stock Tonic contains exactly the same ingredients and is, in fact, the very same preparation.

During the past two or three years there has been a systematic campaign against "Stock Foods" generally on the part of many state officials who claimed that the term was misleading.

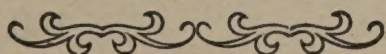
While we do not altogether agree with these persons, we have decided to change the name of Watkins' Pabular Stock Food to Watkins' Stock Tonic, thus removing the only argument ever used against this remarkable preparation.

We never claimed that Watkins' Pabular Stock Food was a complete ration or that it would take the place of clover, timothy, corn or oats in the feeding of live stock.

At our own table we eat salt and pepper, catsup and other preparations that are really food, but whose prime function is to assist the digestive organs to extract the largest possible amount of nutriment out of other food.

We usually call these foods Condiments or Tonics. Therefore, we have decided on the name of

Watkins' Stock Tonic



WATKINS' REMEDIES

FOR LIVE STOCK

The following are the Watkins' Remedies used for Stock

- 1—Watkins' Stock Tonic, (formerly Watkins' Pabular Stock Food)
- 2—Watkins' Liniment
- 3—Watkins' Petro-Carbo Salve
- 4—Watkins' Veterinary Ointment
- 5—Watkins' Veterinary Lotion
- 6—Watkins' Barb Wire Embrocation
- 7—Watkins' Poultry Tonic, (formerly Watkins' Medicated Poultry Food and Egg Producer).
- 8—Watkins' Insect Powder
- 9—Watkins' Stock Dip

Numbers 1 to 6 inclusive are for Horses, Cattle, Hogs and Sheep.

Number 7 is for Chickens, Turkeys, Ducks and all other kinds of poultry.

Number 8 is for Poultry, Sheep, Dogs and Horses. It is also a reliable remedy for insects on plants and vines.

Number 9, Watkins' Stock Dip, is used to kill lice, mites, nits and parasites on Stock as well as for general disinfecting purposes.

Complete Chemical Analysis of Watkins' Stock Tonic

Moisture	8.1300%
Fat	7.6800
Protein	10.6200
Fibre	27.8800
Carbohydrates	13.1200
Silicic Acid.....	1.5210
Iron and Aluminium Oxides	1.9444
Calcium Carbonate....	0.0619
Magnesium Chloride	0.0879
Sodium Chloride.....	27.2383
Sodium Sulphate.....	1.7165
	100.0000%

Watkins' Stock Tonic

Watkins' Stock Tonic is good for the stock you have. You do not need to dispose of the stock that is now making money for you and buy in their place high-priced registered animals.

All you have to do is to use Watkins' Stock Tonic according to directions and then when you come to market your steers or hogs or sell your horses or cows, you will find that its use has enabled your stock to put on greater weight than they otherwise could have done with the same feed. They will also bring a higher price due to better finish.

This is due to the fact that your stock has assimilated the nourishing food elements of their ration and converted them into marketable flesh, milk and work.

Thus every dollar you spend for Watkins' Stock Tonic will come back as \$6 or even \$10 in the way of profits.

The use of Watkins' Stock Tonic enables you to convert the food you feed into a complete ration with less effort on your part. It enables the animal to assimilate a greater portion of the nutriment in its ration. It makes the ration more palatable and therefore more healthful.

A special advantage of Watkins' Stock Tonic is that its ingredients are those that the average farmer does not and cannot profitably raise. In this respect it is radically different from other stock goods, which are often sold at higher prices than Watkins' Stock Tonic.

We believe the average farmer is so situated that he can raise all the clover, oats, alfalfa, barley and legumes, all of which are rich in protein, that he may find it necessary to use in his feeding ration. We do not put any of these articles in Watkins' Stock Tonic. Instead we use those roots, seeds, barks and chemicals that are known to be effective tonics or laxatives, or have other medicinal values, and these are combined with other articles known as diluents, so as to prevent any chance of your stock refusing to eat it altogether or getting larger doses than is necessary to perform the required work in building up and keeping your stock in first-class condition.

Watkins' Stock Tonic is especially valuable during the fattening period. It should be given daily and its constant use will enable your stock to assimilate a larger part of the feed and transform it into prime quality flesh, bringing the top price in the market.

The users of Watkins' Stock Tonic are numbered by the tens of thousands. This fact alone should convince those who have never tried it or those who have tried "stock foods" and been disappointed that Watkins' Stock Tonic is what they ought to feed.

When the Watkins' agent calls on you, have him leave with you a package of Watkins' Stock Tonic. Then use it according to directions and note results. We have made this offer thousands of times and have rarely known a user to be disappointed in the results he got. Many users who started in this way now buy Watkins' Stock Tonic in thousand pound lots.

We manufacture Watkins' Stock Tonic in our own factory, a view of which is shown on inside back cover page. We buy all the ingredients and grind them up under our own supervision. Thus we can guarantee our patrons that every ingredient is absolutely pure and of the best quality to be purchased in the world's markets.

INGREDIENTS

We make no secret about what Watkins' Stock Tonic is made of. We give you a table showing what it contains and for what purpose each drug is used. The proportion of each article of this mixture is based upon what we deem its relative value for its purpose, arrived at by years of experience.

No druggist has this knowledge of scientific proportion and if he had he could not compound this mixture for anything like as small a price as our large capital and perfect facilities enable us to sell it for. Besides, all the material used in Watkins' Stock Tonic is of the very highest quality and fresh from our own grinding mills.

Study this table:

TONICS

Gentian Root
Elecampane Root
Ginger Root
Sulphate of Iron

These are effective tonics and serve to stimulate the whole system.

DIURETICS

Juniper Berries
Salts of Tartar
Bicarbonate of Soda

These act directly upon the kidneys and are called Diuretics.

LAXATIVES

Mandrake Root
Cascara Sagrada
Sulphur

These are laxatives, their action being principally upon the bowels, altho sulphur is also a great blood purifier.

WORM DESTROYERS

Worm Seed
Areca Nuts
Pumpkin Seed
Sodium Chloride

These drugs destroy intestinal worms, tape worms, and pin worms, and eliminate them from the system entirely. They are called Anthelmintics.

CORRIGENTS

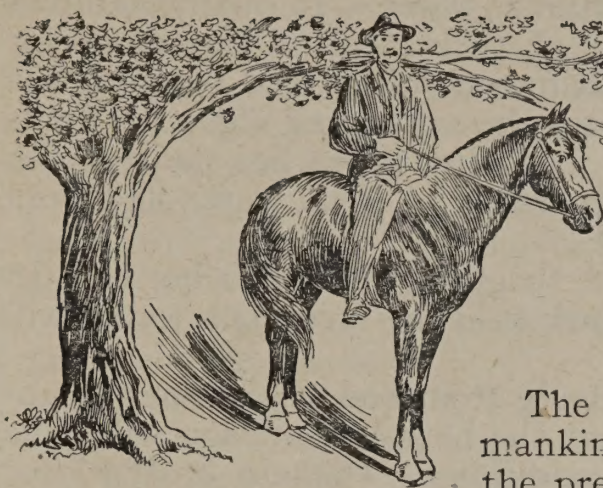
Coriander Seed
Aniseed
Foenugreek Seed

These seeds are added to assist the other medicines in their work by making the mixture agreeable to the stomach. They are called corrigents and adjuvants.

By carefully studying the above list of valuable tonic, worm-killing and blood-purifying ingredients, you can readily see that they should not be administered to stock in an undiluted form, otherwise they would be too strong to take, and the very object for which the tonic is manufactured would not be accomplished. Just as we are obliged to use syrups in some of our liquid medicines, so we must use diluents in Watkins' Stock Tonic. In this connection the reader will doubtless be interested in the following statement of

DILUENTS AND THEIR PERCENTAGES

Ground Linseed meal.....	12.87%
American Ship stuff.....	21.45%
Sodium Chloride.....	30.04%



THE HORSE

The horse is recognized as the best friend of mankind. Never have prices been as high as at the present time, notwithstanding the fact that there are more horses in the country now than ever before. The reason is to be found in the fact that horses grade higher than they did ten or twenty years ago. In bringing about this condition, stock foods—Watkins' Stock Tonic in particular—has admittedly been an important factor. The Agricultural Department reports that there are approximately 20,000,000 horses in the United States today, with an average worth close to \$95.00 a head. Any farmer of a few years' experience will recall the time when a good horse could be bought for \$45.00 to \$55.00.

When a horse is worth twice as much now as it was a few years ago, it becomes twice as important a matter to see that it is kept in the best condition, capable of performing the largest possible amount of work and requiring to be laid off the fewest number of days.

Watkins' Stock Tonic will keep every horse on the farm in the best condition. It will make the feed go further and your horse will be in better condition than he could possibly be without the use of Watkins' preparations.

A good horse is the animal that the average farmer depends upon more than any other. For that reason, therefore, he should exercise the greatest care always to keep his horses in good condition.

Watkins' Stock Tonic will assist you materially in doing this, and not only that but it will make much easier the care of the horse. It will not relieve you of all the care but it will relieve you of the greatest part of that care. It will not enable a lazy man to be still lazier, for a man who does not think enough of his horses to give them proper care would not likely be benefitted by Watkins' Stock Tonic or anything else.

There are a few principles to be observed in the care of a horse and if these are followed out and Watkins' Stock Tonic fed regularly, your horse, barring accidents, may be counted upon to go through the entire season without being out of condition and without being laid up a single day from disease of any sort.

A horse should never be fed immediately after a hard day's work. A small quantity of hay may be given but delay the grain ration until the horse has been in the stall for at least an hour.

In feeding, it's a good rule to give hay or straw before corn or oats. Hay is acted upon by the digestive juices of the stomach, in less time than grain, so if grains are fed first, they will be carried out of the stomach before the stomach has had time to prepare them for digestion. Another reason is that hay requires more mastication than oats and by feeding it first, a greater quantity of saliva will be mixed with the food, thus greatly aiding digestion and assimilation.

Care should also be observed in giving water. In many families children are not allowed to drink water at their meals. The reason for this is obvious as water not only causes them to swallow food before it has been properly masticated but it also dilutes the saliva and digestive fluids thereby weakening their action upon the food after it reaches the stomach and preventing its being assimilated as it would be if no water had been taken.

The same rule holds good in regard to giving water to horses. In winter time, the water should be warmed a little. Ice cold water will cause many digestive ills.

Do not change the horse's food suddenly from one sort of diet to another. Make the change gradually so that the horse's condition will have time to adjust itself to the new food conditions. The use of Watkins' Stock Tonic with every ration will, however, greatly lessen the danger of bad effects of too sudden change of diet.

Be careful to see that the hay or oats or other food is not mouldy or sour. Horses given this kind of food are liable to have bronchitis, heaves, digestive and lung diseases.

Water can be given the horse even if the animal is quite warm, care being taken that it does not drink too much at a time. Seven or eight swallows may be given at each watering which may be at frequent intervals. This is a better method than giving a large quantity at one time.

When the horse is not working, three times a day is frequent enough to water it. Take care that the water is pure. The horse is liable to disease from impure water the same as human beings.

Do not let the horse drink out of hollowed out basins, stale rain water, shallow wells and streams that are likely to be contaminated with sewerage.

Timothy makes the best hay and it is better when a year old than when freshly cut. New hay is hard to digest and frequently causes serious bowel troubles.

For the horse's grain ration, oats is better than corn. When corn is fed better results are secured by grinding it and mixing with bran or crushed oats.

The quantity of feed that should be given the average horse is about 12 pounds of hay and 12 quarts of oats a day or their equivalent in other feeds.

Bran is a good addition to the horse's feed and if corn has been fed, it should form part of the winter ration when the horse needs more heat-producing food than in the summer time.

Watkins' Stock Tonic added to the food will cause it to be digested better and the horse will eat with better appetite, thus keeping itself in the pink of condition winter and summer.

When horses are to be worked heavily during the day, a good plan is to give the heavy feed ration at night. The horse's stomach is comparatively small and he should never be fed, especially when working, more than three times a day. Do not omit the noon meal.

In feeding horses and mules, we do not seek to make the animal gain in weight as we would a steer but rather to keep him from losing weight while at hard work. The ration that will succeed in doing this is sufficient.

The weight of a horse or mule in good condition should be fairly constant. If the weight falls off, look for one of three things: the animal is doing more work than it can stand; the ration fed is not sufficient to maintain it; or it is suffering from sickness.

An increase or decrease of a few pounds in the weight of an animal does not signify anything as the gain or loss may be due to the amount of water drunk by the animal the day before.

On a warm day an average horse or mule will drink from 50 to 110 pounds of water.

Carrots, swedes and mangolds are much relished by horses. A sick horse will often be tempted to eat a few carrots when it will not touch any other food.

Mares suckling foals will find all the nourishment they require in an early summer pasture.

In feeding horses, it is a safe rule to remember the saying, "Old oats, old hay and old beans long crushed."

The foal will graze with the mother and soon shares with her any outdoor food she may be getting and thus prepare itself for weaning. It should be pastured out in the daytime and in a shed or well aired loose box at night. When brought in at night, it should be supplied with a rack of hay and a trough mixture of crushed oats and Watkins' Stock Tonic.

When a horse is working, the food should contain only a small amount of protein. Experiments show that food containing .82 of a pound per day is as adequate for a working horse as double the amount.

SOME DEFINITIONS

SOUND:

When a horse is sold as "sound", the purchaser has the right of returning the animal if found to be otherwise within a day or two.

SERVICEABLY SOUND:

This term applies merely to wind and the capability to do work.

END OF THE HALTER:

The purchaser takes all chances on the number and character of the diseases that may be present.

HOW TO EXAMINE

The ideal conditions under which to examine a horse for soundness are: at his home; first in the stable, next in the door; then outside the stable and finally in action.

The examination in the stable should include evidences of habits as well as that of diseases.

Examine first for diseases. Note the position of the feet, whether pointed, knuckling or favoring one another.

Second, for the vices. Look for evidences of cribbing, weaving, biting, halter pulling and kicking.

Third, for tractability. Note how the attendant makes his approach, the behavior on being groomed, in receiving the harness, saddle or bridle.

Fourth, examine the horse in the doorway. Examine the eyes, nostrils at rest and the teeth for age. Make a detailed examination of the body. Use the hand as much as the eye. Take first one side and then the other. Examine in full profile right and left, position full front and rear and then obliquely front and rear. Change your position in making your examinations rather than have the horse changed.

The most serious vices of a horse are: balking, difficult grooming, difficult harnessing and mounting, difficult shoeing, biting, backing and kicking.

DISEASES OF THE HORSE

APOPLEXY.

Causes. Degeneration or disease which weakens the blood vessels. Anything that tends to induce congestion in the brain.

Symptoms. Sudden loss of feeling and motion; sleeplessness, snoring and difficult breathing.

Treatment. Place the animal in a quiet, cool place. Avoid all stimulating food. Too much doctoring does more harm than good. Blood-letting in an apoplectic fit is very dangerous. Feed two tablespoonfuls of Watkins' Stock Tonic three times a day.

ASCITES. (Dropsy of the Abdomen).

Causes. A result of a sub-acute or chronic peritonitis; or due to disease of the liver, kidneys, heart or lungs.

Symptoms. Tenderness; awkward gait on hind legs; dullness; occasional colicky pains; shown by looking back and striking at belly with hind feet.

Treatment. Very difficult to cure. The tonic principles in Watkins' Stock Tonic are recommended by the highest authorities. Feed a heaping tablespoonful three times a day with good, nutritious foods and exercise patient gently.

ASTHMA. (See Broken Wind).

BROKEN WIND—Asthma or Heaves.

Causes. Authorities differ as to causes, but the disease is always associated with disorder of the function of digestion.

Symptoms. Peculiar movement of the flanks and abdomen, peculiar cough, short, sometimes like a grunt. Animal has depraved appetite and will sometimes eat dirt and soiled bedding in preference to clean food. Passes off an offensive odor. Stomach overloaded and becomes "pot-bellied". Colic may occur. Can't stand much work.

Treatment. When the disease is established there is no cure for it. Proper attention to diet will relieve distressing symptoms to some extent. With best quality of food, chances of having the disease are lessened. Clover, hay and bulky foods with little nutriment should be avoided. Do not feed moldy or dusty hay, fodder or food of any kind. Always water before feeding. Turning on pasture gives relief. Carrots, potatoes, or turnips chopped and mixed with oats or corn are a good diet. To keep in good condition feed two tablespoonfuls of Watkins' Stock Tonic at each feed. Broken-winded animals should not be used for breeding purposes, as the disease is likely to be inherited.

BRONCHITIS. (See Coughs).

BRUISES.

Contused wounds, where skin has not been broken.

Treatment. Bathe the parts thoroughly with hot water a couple of hours. Then let the water gradually cool and bathe with cool water an hour or so. Dry the parts thoroughly and apply Watkins' Liniment. Put on a light bandage and allow the horse to

rest. If necessary repeat the above treatment two or three days. If bruise is severe and sure to scab, encourage it by a poultice of linseed meal, wheat bran, turnips, onions, bread and milk or hops. The strength of the patient must be supported by good food and the tonics in Watkins' Stock Tonic which should be fed three times a day, two tablespoonfuls at a time.

CAPPED ELBOWS.

Cause. Lying down on the rough, sharp heel of the shoe.

Treatment. Feed Watkins' Stock Tonic three times a day. Rub the parts well with Watkins' Liniment and have the horse shod shorter at the heels with smooth and rounding shoes. To prevent the habit of lying down like a cow, fasten a piece of wood across the stall at some distance from the manger.

CAPPED HOCKS.

Cause. Caused by rubbing or striking partitions of the stall with the hocks. Use the same treatment as for bruises. As a preventive, pad the sides of the stall with straw mats or mattresses, covering the posts in the same way.

CATARRH—Cold in the Head.

Cause. Inflammation of the mucous membrane of the head.

Symptoms. At first the membrane is dry, congested and irritable, of darker color than usual. Soon a watery discharge from the nostrils takes place. The eyes may also be affected and tears flow over the cheeks. The animal has some fever, is dull, gives out a sort of sneezing snort. In a few days the watery discharge becomes thick like mucilage and of a yellowish white color; animal loses appetite and becomes weak.

Treatment. Give the horse a few days' rest with pure air and good food of bran mashes, scalded oats, linseed gruel and grass if in season. Four or five times a day for fifteen or twenty minutes at a time; let the animal inhale steam by holding its head over a bucketful of hot water and stirring with a wisp of hay. Don't put the horse's head in a bag, to breathe over and over again the foul air expelled from the lungs. If constipated give an injection of warm water into the rectum three or four times a day, but do not give purgative medicines. For loss of appetite and as a tonic feed Watkins' Stock Tonic three times a day.

COLIC.

Treatment. In ordinary cases take one pint of warm water, add to this one teaspoonful of soda, a handful of salt, and two ounces or about one-fifth of a dollar bottle of Watkins' Liniment. Give this to your horse and in fifteen or twenty minutes he will be well. In very severe cases, when the horse is very much swollen, and there appears to be much acid in the stomach (which you may know by the horse belching during his sickness), add a little more soda, and then give four ounces of Liniment and drench your horse. If this does not give relief in fifteen or twenty minutes repeat your dose. It has rarely been known to fail to give relief when the horse is curable.

CONTAGIOUS PNEUMONIA.

Use Watkins' Stock Tonic.

COUGH.

Cause. Cough is but a symptom, the effect of a disease. Roaring, heaves, pleurisy, pneumonia, all have a cough peculiar to each affection.

Symptoms. The animal appears dull, appetite wholly or partially lost. The head hangs; breathing is very much quickened; the cough at first is dry and having somewhat the character of a barking cough. The mouth is hot; the visible membranes in the nose are red; the pulse is frequent at first hard and quick; in a few days a whitish discharge from the nose ensues.

Treatment. Make the horse as comfortable as possible in a box stall with pure air. Cover body with a blanket. Hand rub the legs until they are warm. Then rub the legs and chest with Watkins' Liniment, covering the legs with bandages. Compel the animal to breathe in steam as advised for "Cold in Head", putting in the water a tablespoonful of oil of turpentine. In severe cases this should be done once an hour. When symptoms have abated, give a tonic treatment with Watkins' Stock Tonic, feeding two tablespoonfuls three times a day. Do not be in a hurry to put the animal to work. Give it a chance to regain its full strength.

Horses and mules are its victims. The disease is one which will require from eight to fourteen days to run its course.

COSTIVENESS.

Feed Watkins' Stock Tonic.

DIARRHŒA.

Causes. Due to eating moldy or musty food, drinking stagnant water, diseased condition of the teeth, eating irritating substances, or being kept on low, marshy pastures and exposure during cold nights; low, damp stables, or to some morbid or inflammatory condition of the intestinal canal or some of its annexed organs.

Symptoms. Frequent evacuations of liquid stools with or without pronounced abdominal pain; loss of appetite, emaciation, etc.

Treatment. Remove the cause (see above) if possible. If due to faulty food or water, change these. If it results from some irritant in the intestines, give Watkins' Stock Tonic three times a day. If the purging continues check it by giving wheat flour in water, with three tablespoonfuls of Watkins' Liniment.

DISTEMPER—Strangles.

Cause. The cause of distemper is infection by direct contact with an animal suffering from the disease, or indirectly through contact with the discharges of an infected animal, or by means of the atmosphere in which an infected animal has been.

Symptoms. The horse is sluggish, dejected, pays little attention to various surroundings. In many cases loses appetite. Thirst is increased but not much water taken at a time. Coat becomes dry; hairs stand on end; chills in the legs, with trembling eyes and mouth bright rosy color; pulse quickened. In a couple of days a cough is heard, with a discharge from nostrils; at first watery, then thicker,



bluish in color and sticky and finally yellowish and much greater in quantity. The jaws swell; the animal becomes delirious, roaring, plunging, wandering in a circle, or standing with the head wedged in a corner of a stall, which indicates a collection of matter in the brain.

Treatment. The swelling of the gland should be promptly treated by bathing with warm water and flaxseed poultice and as soon as there is any evidence of formation of matter, they should be opened. Be careful about the diet, using moistened hay. Warm coverings and protection from exposure to cold are of the utmost importance. To keep the bowels in proper working order and the system in good condition, feed Watkins' Stock Tonic three times a day.

FOUNDER.

Causes. Concussion, over-exertion, exhaustion, rapid change of temperature, etc.

Symptoms. Lameness, pulse quickens, temperature rises sometimes to 106° Fahrenheit, but generally ranges from 102° to 105°. Animal breathes quick and nostrils are widely dilated; looks anxious and shows most acute suffering; body is bedewed with sweat. Urine is high colored and scant. Appetite is lost and thirst greatly increased. The affected feet are hot and dry to the touch.

Treatment. As a preventative, all causes should be removed if possible. Fat animals should not be worked hard, and in warm weather should have moderate work and when resting immediately after work, should be protected from cold air or drafts. The animal must be properly shod, but change in shoeing must be gradual, so that the tissues can adapt themselves to the work they have to do.

Curative Measures. The body should be warmly clothed and warm drinks given to draw the blood in increased quantity so as to direct it from the feet, at the same time the feet should be placed in warm water, so as to increase the return flow of the blood. In the course of a half hour the feet may be changed to cold water, which serves as a tonic to all the tissues, and kept there until recovery is completed. In cases of active congestion the warm foot baths should be omitted and cold ones used from the start. After the inflammation has been reduced, feed the horse Watkins' Stock Tonic, three tablespoonfuls at a feed to restore the appetite and tone up the system. Don't be in a hurry to put a foundered horse to work, otherwise permanent recovery may never be effected.

GLANDERS.

Glanders is a contagious disease that attacks horses and mules. It can be carried through the air for short distances but generally comes by close contact.

The animal should be destroyed as soon as it is known positively that it is affected with Glanders.

HEAVES. (See Broken Wind.)

INFLUENZA.

Influenza is an infectious and highly contagious disease attacking horses and mules. It is also known as Epizootic, Pink Eye, Bilious Fever, Typhoid Fever, Catarrhal Fever and Shipping Fever.

The onset is usually by a chill and rapid development of fever. The diseased animal should be cared for away from the healthy as far as practicable.

JAUNDICE—The Yellows:

Cause. This is a condition caused by the retention and absorption of bile in the blood.

Symptoms. The eyes, the nose and mouth are yellowish instead of the pale pink color of health.

Treatment. Purify the blood by a regular course of Watkins' Stock Tonic.

SCOUR. (See Diarrhoea).

SCRATCHES.

Cause. Overfeeding on grain. Unwholesome fodder; close, hot, dry, dirty stables; constant contact with dung and urine, and their emanations. Working in deep, irritant mud.

Symptoms. Usually sets in with swelling, heat and tenderness of the hollow of the heel, with erectness of the hair and redness (in white skins), with stiffness and lameness, which may be extreme in irritable horses. Soon after slight cracks appear transversely and may gain in depth and width, and may even form matter. More often they become covered at the edges or throughout by firm scabs, resulting from the dryness of the liquids thrown out and the skin becomes increasingly thick and rigid.

Treatment. The first step is to find the cause (see above) and remove it if possible. Feed Watkins' Stock Tonic regularly, three table-spoonfuls at each meal. When the legs swell, exercise on dry roads. Hand rubbing and a bandage saturated with Watkins' Liniment are recommended.

SPOTTED FEVER.

Spotted Fever is not contagious and when horses and cattle are affected, the trouble is usually secondary to some other disease.

It is mistaken for Glanders in horses and for Black Leg in cattle.

Treatment should be prescribed by a skilled veterinarian.

STOMACH STAGGERS.

Cause. Occurs most frequently in those horses that after a long fast are given large feed; or in those that have gained access to the grain bin and eat ravenously. The stomach is so enormously extended with the food that it loses all power of contracting upon its contents.

Symptoms. The horse soon after eating becomes dull and heavy, or drowsy; slight colicky symptoms are observed, and are continuous. He rarely lies down, but carries his head extended and low, nearly touching the ground. Dullness, rapidly increases; the eyes are partially closed, the vision is impaired; he presses or thrusts his head against the manger or sides of the stall, and paws or even

climbs with his fore feet. Breathing is less frequent than in health; pulse slow and sluggish; becomes delirious; cold sweats bedew the body; patient trembles violently, slobbers or vomits a sour fermenting mass; staggers from side to side or plunges madly about.

Treatment. Treatment is not always satisfactory. A purgative of one ounce of Barbadoes aloes should be given at once. Then try to stimulate the walls of the stomach to contraction by giving a dose of Watkins' Liniment, the same for "Colic in Horses." Injection into the rectum (last gut) of two ounces of turpentine in eight ounces of linseed oil may stimulate the bowels to act and in a measure relieve the stomach. Cold applications to the head relieve the trouble. To restore all the normal functions of the animal, give him a regular course of treatment with Watkins' Stock Tonic. To prevent a recurrence of the trouble, feed at shorter intervals, in smaller quantities at a time and secure the feed bins, so that if a horse gets loose, he cannot get at the feed.

STRANGLES. (Distemper.)

- Strangles is a horse and mule disease, also known as Distemper and Colt-ill. It is both infectious and contagious.

It starts with fever which begins to subside on the second day and is followed by watery discharge from the mucous membranes of the nostrils.

The disease generally terminates favorably.

WORMS—Intestinal, Tape Worms, or Pin Worms.

Cause. Most frequently seen in young horses and in those that are weak and debilitated, or those kept in low, wet, or marshy pastures, and in those that drink stagnant water.

Symptoms. Slight colicky pains, switching of the tail, frequent passages of manure, and some slight straining; itching of the anus; and rubbing of the tail against the stall or fences. Horse is in poor condition; does not shed his coat; is hide bound and "pot-bellied"; appetite is depraved; licking the wall; biting the wooden work of the stalls; licking parts of his body; eating earth and being particularly fond of salt; bowels are irregular, constipation or diarrhoea being noticed. The one symptom, however, that may not deceive us is seeing the horse pass worms in his dung.

Treatment. Watkins' Stock Tonic contains some of the very best worm medicines known to medical science, including such well-known remedies as wormseed, areca nut, pumpkin seeds, and the best bitter vegetable tonics, etc. Before starting the use of the Stock Tonic let the animal fast a long time. Don't give it anything to eat for twelve to fifteen hours. Then give a half feed thoroughly mixed with four or five large tablespoonfuls of the Tonic, and repeat this dose at each regular feeding time thereafter until the worms are driven out. Unless Watkins' Stock Tonic with good food and pure water are given to tone up the digestive organs, the worms will rapidly accumulate again, even though they may all have been expelled once.

MARES

Brood mares during the winter previous to foaling, if not worked daily, should be kept in an open yard with shelter from severe storms. Daily exercise is very important to them during this period.

Ensilage is too much of a laxative to be adopted as a daily ration for mares with foal. Dry corn stalks will have the opposite effect on them. Both conditions are equally injurious to the prospective mother. One feed of corn stalks, and one of hay with access to a rack kept well filled with fresh straw, with a few ears of corn daily, with a proper course of Watkins' Stock Tonic, will prove an economical as well as a safe way of feeding mares that are not in the harness during the winter season. If at work, hay with oats and corn mixed with wheat bran, is a wholesome and safe ration.

FOUR GOOD RULES

Four good rules to observe for keeping a horse in good condition are:

That the food is being thoroughly digested;

That no more is given the horse than he has the appetite to clean up and the capacity to assimilate;

That he is regularly and thoroughly groomed;

That he receives sufficient daily exercise to keep him in perfect health.

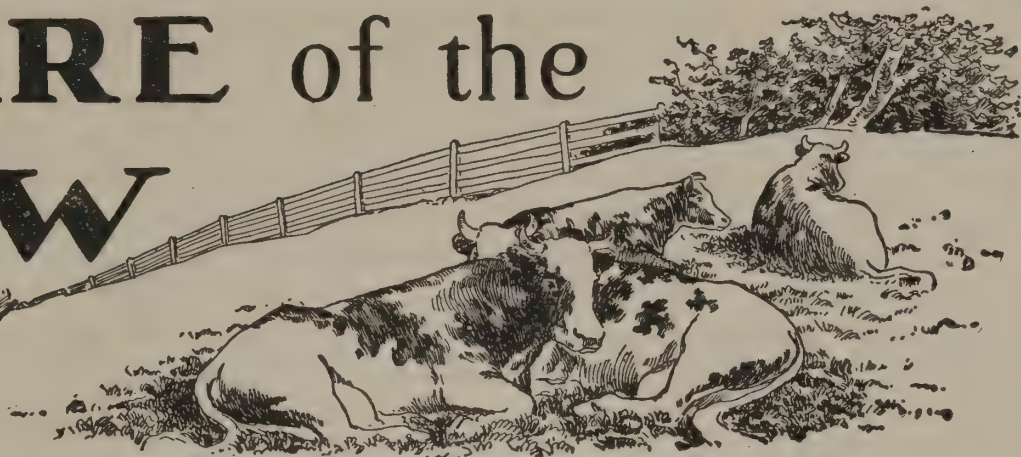
Mares nursing foals should be given a ration that will not only increase their flow of milk, but materially enrich it. We have found that oats and bran in equal bulk, with about one-fourth in bulk of corn added, makes a good ration for a mare in milk. This should always be moistened before feeding.

WATKINS' INSECT POWDER



SURE death to lice and mites. Made of the strongest ingredients and best insecticide known. It is harmless to poultry, but sure death to lice. Can be easily applied and a small quantity will free your poultry from vermin. 25 cents a package, and much cheaper proportionately in 15 pound pails. Order a pail from our agent. It will pay.

CARE of the COW



The cow contributes more to the comfort of mankind than any of the domestic animals. First and foremost is to be counted milk production, which constitutes a food relished by all people from childhood to old age. From milk are also produced two other universal food products—butter and cheese. Beef is the meat food of civilized mankind, while from hide to hoofs every portion of the animal contributes to man's comfort. We recognize the close association of the cow to the human family and the family cow is the pet of every household.

Dependant as man is to so large an extent upon the cow for food, it is fitting that everything should be done to make the milk production attain a maximum both in quantity and in the richness of butter fats. In order to attain these results with the least amount of effort Watkins' Stock Tonic has been prepared. Added to the daily ration it will keep a cow in healthful condition and increase the milk supply with its consequent addition to the family purse.

Where a herd of cows is kept, the milk from each cow should be tested so that the owner will know exactly which cows are below grade. Proper care and consistent feeding with Watkins' Stock Tonic can bring up the percentage of butter fat and increase the number of pounds of butter yield. In order to pay for her food and care, a cow should produce about 200 pounds of butter in a year and this will also give a fair return to the owner. Every pound of butter in excess of 200 pounds represents just that much additional profit to the owner.

When you plan to buy a cow, do not put too much faith in appearances, nor trust too much to the breed. All other things being equal, a well-bred cow is apt to give larger quantities and a better quality of milk than a cow of low breed, but there is no certainty about it. Just try to find out what the cow's record as a milk producer is and then apply the Babcock test and find out what percentage of butter fat the milk contains. It is not necessary in a book like this to go into details as to the manner of making the Babcock test. Most farmers are familiar with it and if they are not they can write to their state experiment station for full particulars.

There is little question but that a large majority of the cows that are now unprofitable could be made profitable if proper feeding methods were followed. By the same rule, proper feeding with Watkins' Stock Tonic would make good cows better. This plan has been tested and is being tried daily on thousands of farms where cows are owned and the results obtained by the use of Watkins' Stock Tonic leave no room for doubt.

in the minds of the owners, that it is the best investment they can make. It enables a cow to assimilate with less effort the food it eats, and then there is a larger milk production and the cow remains in better condition.

Watkins' Stock Tonic is prepared to enable the owner to accomplish the most profitable results. We ask you to give it a fair trial and you will find that the ingredients of this wonderful tonic are such as to improve the powers of digestion by increasing the flow of saliva and the digestive juices, so that the greatest possible benefit is derived from the food consumed. The organism of a cow is delicate and for that reason, if the animal is to be a profitable one, owners should see to it that the food is at all times healthful and appetizing. A cow that does not eat well can never be a money maker.

The roots, spices and seeds that make up Watkins' Stock Tonic give food the flavor that the cow likes and in addition to improving its appetite and general condition, it makes you certain of receiving a profitable return in milk and butter yield.

MARKET CLASSES—MARKET GRADES

These are not the same.

Market Classes are distinguished as:

First—Beef

Second—Butcher Stock

Third—Cutters and Canners

Fourth—Veal Calves

Fifth—Stockers and Feeders.



The Grades are:

First—Prime

Second—Choice

Third—Good

Fourth—Medium

Fifth—Common

Sixth—Inferior.

Weight has relatively but small influence in determining the grade and price of fat cattle. Quality and condition largely govern both.

When cattle grade the best of their class they command a premium on the market. Such cattle sell at strong prices and for their full value.

STEERS

A good plan is to mix grain with roughage, which compels the steer to spend more time in chewing than when grain is fed alone.

It takes about 1000 pounds of grain for every 100 pounds of gain with well fattened steers, besides about 5000 pounds of coarse feed.

Cut hay will enable the steers to put on more weight with less feed than when fed whole hay.

- Give the steers free access to water at all times.

A steer will eat about half an ounce of salt a day.

It is a good plan to have salt boxes well filled with loose, barrel salt in each feed lot.

An expert has said that "Contentment is fat;" by this he means that the farmer who could get the largest gain from his stock should do everything that adds to the comfort of his stock.

Give the steers a place where they can lie down comfortably on dry ground. A steer makes the greatest gain when he spends the most time lying comfortably chewing his cud; he will not spend enough time lying down to make good gains when the lots are muddy.

Have an exact time for feeding; steers thus learn when to expect their feed and they do not lose weight by over-eating as they do when fed at irregular times.

The feed box should be kept in the driest part of the yard.

A feed box 16 feet long, $3\frac{1}{2}$ feet wide at the top, 2 feet wide at the bottom and $1\frac{1}{2}$ feet in depth is large enough for 10 steers. The top should be about $2\frac{1}{2}$ feet from the ground. The box should be made tight.

Do not attach the feed box to anything, but have it so that it can be moved from one place to another.

When steers begin to shed their hair in the Spring, the following plan will keep them from rubbing down sheds and fences:

Cut down one or more trees, according to the number of cattle, and place them in the feed lot. Rest one end of the tree on the ground and raise the other end high enough so that it just clears the back of the tallest steer. It is well to bolt or anchor the tree in place firmly. You will be surprised at the amount of enjoyment the cattle will get in rubbing themselves on trees fixed in this manner.

Observe absolute cleanliness in feeding.

If pulp or soft foods are fed, only give such an amount as the cattle will clean up at one time with reasonable waste.

The troughs should be cleaned out daily. Unless this is done, the troughs will soon smell sour from the decaying food and there is greater likelihood of disease attacking the cattle.

Have the feed racks or hay and the feed troughs near together so that steers will have to travel but a short distance in passing from one to the other.

In shipping cattle to market it is usually well to figure upon a shrinkage of from four to five percent.

Corn stover silage or other cheap food produced green on the farm can be fed with as good results for roughage as timothy hay exclusively and effect a material saving in cost of feeding.

Bright, well cured corn stover fed with an equal weight of alfalfa and corn will give larger gains than corn and alfalfa alone; although all these should be fed with Watkins' Stock Tonic.

Alfalfa hay is superior to prairie hay for beef production.

Corn stalks possess a food value for stock that should not be ignored by the careful farmer. They possess the greatest food value immediately after the ears ripen, when the corn stalks should be cut and put into the shock. If left until later the feeding value rapidly decreases.

Alfalfa hay and corn-and-cob meal with Watkins' Stock Tonic form an excellent ration for fattening. There is no danger of the stables being too cold for fattening steers provided they are kept dry and well bedded.

Soft coal cinders form an excellent drain for cattle yards and will prevent them from becoming excessively muddy. Keep the cow shed well drained and provide plenty of bedding. Experiments have proved that steers fattened on heavy grain rations bring enough higher price to more than off-set the increased cost of ration. The higher the prices of cattle, the more profitable will be the use of Watkins' Stock Tonic, for it permits the feeder to secure maximum finish in the shortest possible time. A general rule for fattening cattle is to use twice as much grain as rough feed, though a good rule to follow is to allow the steers all the roughage they will eat during the fattening period.

PARAGRAPHS

The cattle shed should have open doors if possible facing south to permit the cattle to pass in and out at will.

Keep the cattle sheds well bedded with straw.

When fattening steers for beef production, encourage them to lie down when not eating. Keep a box of salt in each shed. See that the yards are well drained.

Cattle should have the run of a yard in which is stationed a tank of water. This water should be always pure. In extremely cold weather tank heaters should be used to prevent ice forming.

Do not take too much stock in what is called a "Balanced Ration," or regard it as a combination of feeds that always gives the same results.

As a matter of fact, a combination that is balanced for one purpose with one species of animal of a given age and condition might be unbalanced if the purpose, the species, the age and condition are different.

A ration balanced for a growing calf is unbalanced for fattening a steer. For a dairy cow, it is still different.

Feeding standards are very useful guides but must not be allowed unquestionable dictation.

BREEDING

No heifer should be bred younger than twelve or fifteen months old. She will do much more effective work throughout the remainder of her life if allowed herself to reach maturity, or nearly so, before producing offspring.



However, for dairy purposes it is well to breed the heifer so that the calf will be dropped when the heifer is two years old. This fixes the milking habit early in life and the animal throws her energies to milk production. In the case of beef cattle, the heifer may be given another year before being bred.

After the first calf, dairy cows should be bred so as to calf yearly.

For milk production during spring and summer, breed during June to August, so that the calves will drop from March to May when grass and forage crops will keep up the yield of milk.

For winter dairying breeding should take place from December to February.

The cow usually comes in heat about four weeks after calving and every 19 to 21 days thereafter until served.

The control of sex is an unsolved problem.

Barrenness may be due to several causes, the most common being fleshy condition and lack of exercise, improper feeding, stricture of the mouth of the womb and mating animals of too close kin. The mention of these causes suggests the remedy—less feed, giving those rich in protein, plenty of exercise, and if necessary dilation of the neck of the womb. If the cow goes three or four months after service without showing further signs of heat, she is probably pregnant. Few animals will permit service after conception.

During pregnancy the mother must maintain her own body and at the same time nourish and build up the new life within. Proper feeding should be observed, using those feeds rich in protein, such as oats, bran and clover, with Watkins' Stock Tonic. Give plenty of pure water and abundant exercise. Treat your animals kindly.

One or two months before calving, the cow should be allowed to go dry, though in some cases where the cow is difficult to dry off, more harm to the udder may be caused by stopping the milk than by permitting the flow to continue.

A good plan to follow if calving is to occur during the grass season, is to turn the cow out to pasture for the last month. The bowels will be kept relaxed and the animal in medium thin condition.

The time duration of pregnancy is usually 40 weeks or 282 days after conception, though it will differ in individual animals, varying from 260 days to as late as 300 days in rare instances.

CALVES

CARE OF THE COW BEFORE CALVING.

Strong, thrifty calves cannot be expected from cows that have received poor feed and poor care previous to calving time. The cow must be supplied with wholesome, nutritious feed, containing the elements that are necessary to the proper development of bone and muscle in the unborn calf.

Where the cow has access to good pasture with plenty of spring-water she needs little or no attention until two or three days before calving. If she has secluded, shady and otherwise comfortable quarters separate from the other cattle, and is carefully watched by an attendant, she may need no other attention until after the calf is dropped. Sometimes luxuriant pastures will stimulate heavy milkers to produce too much milk prior to calving, in which case the supply of feed should be reduced, and in extreme cases the milk removed before calving.

When kept on dry feed care should be taken to provide plenty of succulence. Ensilage and roots serve an excellent purpose, the object being to keep the bowels loose. When alfalfa or clover hay is used for roughage very little grain is necessary. With less nitrogenous rough feeds, a grain mixture of two-thirds bran and one-third oil-meal is excellent. Soy beans may be used as a substitute for oil-meal.

In cool or cold weather the cow should be placed in a box stall, well lighted, with plenty of ventilation. When the calf is dropped, it is well to blanket the cow until she regains her normal condition. In the absence of anything better, gunny-sacks sewed together will do very well.

Light, loosening feeds, water from which the chill has been taken off, should be given. Cold water is liable to cause contraction of the womb and retention of the afterbirth. If the latter is not discharged in from twenty-four to forty-eight hours it should be removed.

If the udder is heated and caked it is advisable to milk the cow frequently, though not quite dry, and the udder should be steamed by rubbing with a flannel cloth dipped in as hot water as the hand will bear, after which the udder should be rubbed dry, and treated with Watkins' Petro-Carbo Salve.

If there are any signs of constipation, it is well to administer from one and one-half to two pounds of Epsom salts dissolved in water. All these points will aid materially in keeping the cow in a good, healthy condition, and consequently give the calf a good, healthy start.

As soon as the calf is licked dry by its mother, it should have strength enough to rise and suck; if it has not, it should be assisted. The calf may be taken from its mother after its first meal, or, if preferred, can be left with the cow until the milk is good.

It is easier to teach the calf to drink if it is taken away early.

If the calf is taken away when four or five days old, it will make good gains the first week, but if left two or three weeks, the first seven days after weaning will be a losing period.

If the cow's udder is caked it is desirable to leave the calf with her, as the rubbing of the calf tends to alleviate the inflammation.

The stomach of the young calf is very delicate and all changes in food should be made gradually. When changing from whole-milk to skim-milk, decrease the amount of whole-milk about a pound a day, adding a pound of skim milk a day. Decrease the one and increase the other until the change is complete.

A good way to start a calf on grain food is to place a little grain in its mouth immediately after giving it a milk ration. In this way it gets a taste of the grain and will soon go to the feed box and there eat with a relish.

Calves fed shelled corn make better gains than those fed corn on the cob.

If grain is high and there is no particular object in forcing the calves to the greatest possible limit, the grain ration may be reduced without harm.

When calves are fed for future usefulness in the dairy care should be taken not to get them too fat. Calves will begin to eat hay about the same time they begin eating grain. Be sure that the hay is bright and clean. Alfalfa should not be fed until the calves grow older, but should be given as soon as properly handled. Do not give them more than they will eat up clean at each feed.

Calves enjoy clean, fresh water. An automatic waterer placed just about the surface of the ground is a splendid arrangement for supplying this want.

Calves demand salt, as well as older stock. This should be kept before them at all times.

AVERAGE WEIGHT OF CALVES AT DIFFERENT AGES

Birth,	75 pounds
One month,	110 "
Two months	145 "
Three months,	180 "
Four months,	230 "
Five months,	285 "
Six months,	350 "
Seven months,	400 "
Eight months,	450 "
Nine months,	500 "
Ten months,	575 "
Eleven months,	625 "
One year,	650 "

BREAKING THE CALF TO DRINK

It is well to leave the calf by itself for at least twelve hours as attempts to feed earlier than this usually do the calf no good and may injure the feeder's temper. If the calf's muzzle is held in the milk and its mouth pried open once, so that it tastes the milk, the calf can generally be taught to drink without the feeder being obliged to place his hand in the milk and allow the calf to suck his finger.

The calf is unable to eat hay or grain until it is a week or ten days old. During this period it is not wise to try to feed skim-milk. At first the whole-milk should be fed three times a day.

A calf from three to five weeks of age can be fed from ten to twelve pounds daily; from seven to eight weeks old, fourteen to sixteen pounds, and when from three to five months of age can be fed eighteen to twenty pounds of milk.

The milk should always be fed warm and sweet. Next to overfeeding there is probably nothing that causes greater difficulty with hand-fed calves than feeding sweet milk one meal and sour milk the next.

Do not mix corn or any other starchy feed with milk.



DISEASES OF CATTLE

ABORTION. (Miscarriage, Losing, Slipping, Slinking.)

The cow is most liable to abort, with mare and sheep following in order. Sows are seldom subject to this mishap. Even if the young creature is born alive, it rarely develops into a valuable animal.

Abortion may result from accident, irregular or improper feeding, or generally poor condition of the animal. Animals that have been fed Watkins' Stock Tonic will be found generally to carry their young through the entire period without mishap.

There is a disease called Infectious Abortion which is apt to be conveyed to other cows, mares, sheep or sows. Much can be done to prevent the spread of infection by disinfecting infected cows and bulls and premises occupied by such animals. All dead fetuses and membranes should be burned, as well as all litter in the stall where the abortion occurs. For disinfecting, use Watkins' Stock Dip.

ACTINO MYCOSIS.

The common names for this disease are: Lumpy Jaw, Big Jaw, Cancer Jaw, and Wooden Tongue. The cause of the disease is a fungus which attacks cattle, rarely sheep, swine and horses. The disease is not contagious. It is due to eating dry, stiff forage. Cattle suffering from this disease should be treated by the Iodide of Potash method, by injections of Iodine or by a surgical removal of the affected part. Advanced cases should be slaughtered.



ACUTE INDIGESTION.

Sometimes called Hoven or Bloat. The causes are not always apparent but are generally due to over-feeding or sudden changing from dry feed to green, such as corn, sorghum, clover or oats, which undergo fermentation in the paunch. Treatment may be preventive or curative. Avoid over-feeding of highly concentrated food, such as grain, cotton meal, oats or wheat; change from dry to green feed gradually.

Curative remedies must be directed toward removing the undigested food and preventing fermentation and death while removing these materials from the alimentary canal. If the animal can swallow, give Epsom Salts; do not repeat this under 12 or 24 hours. If the animal begins to improve, feed carefully for the next few days, giving salt every day. At this time granulated salt is better than regular salt.

ANTHRAX.

An infectious disease which attacks cattle, horses, sheep, hogs and all other domestic animals. It is also known as Spinach Fever and Charbon.

Little can be done in the way of treatment but prevention may be accomplished by vaccinating in much the same manner as for Black Leg.

The dead animal should be burned or buried with quick lime. The stable should be disinfected with Watkins' Stock Dip.

BLACK LEG.

Sometimes called Symptomatic Anthrax, Black Quarter, and Murrain.

The treatment must be wholly preventive. A Black Leg vaccine should be used once or twice a year on farms where this disease is known to exist.

The corpse of an animal should be burned or buried in quick lime and the stable thoroughly disinfected with Watkins' Stock Dip.

CATARRH. Cold in the Head.

Causes. Sudden exposure to wet or cold, after being used to shelter, breathing irritating gases, etc.

Symptoms. Redness of the mucous membranes of the nose and watering of the eyes. The mucous membrane first becomes dry, afterwards a watery discharge appears. The animal becomes languid, inclined to move about; loses appetite.

Treatment. Too much importance cannot be attached to good nursing. The animal should be housed in a well ventilated place, with good, healthful surroundings. In cold and damp weather it should be kept warm with blanketing. Allow it to inhale steam, the same as "Catarrh in Horses." Don't bleed or purge. or give powerful quieting medicines but feed Watkins' Stock Tonic three times a day.

COLIC. (See Colic in Horses.)**CORN STALK DISEASE.**

Affects cattle most often in the spring and fall while they are grazing upon corn stalks, but it may affect horses, swine and sheep.

The disease is a great deal like Black Leg. Little can be done in the way of treatment and the best preventive is to change the stock not affected to other pastures.

COW POX.

This skin disease occurs in cows, rarely in other cattle. The eruptions are usually on the teats, the udder and neighboring parts. Recovery takes place in from 21 to 40 days. The fact that milkers who became infected with cow pox, were not victims of small pox, led to the discovery of vaccination.

Cows attacked with the disease should be isolated, and the milker not allowed to milk any others. The milker should wash his hands with Watkins' Toilet Soap.

After milking, apply Watkins' Stock Dip to the cow's bag and teats.

DIARRHŒA—Scouring.

Causes. Irritation of intestines by food taken in excess, or of improper quality, and this especially applies to soft, watery, green food; excessive secretions, especially bile; impure water, and water drunk in excess; mechanical congestion of the intestinal vessels; acute or chronic inflammation of the bowels.

Symptoms. Animal is dull, places its feet well under the body; arches its back and shows thirst. Passages from the bowels are frequent, at first consisting of thin dung, but as the disease continues they become watery and offensive smelling and may even be streaked with blood. Frequently accompanied by fever; great depression; loss of strength; rapid loss of flesh and may terminate in death.

Treatment. When due to irritating food give a pint of castor or lin-

seed oil. When bowels are irritated, an ounce of carbonate of magnesia and half an ounce of tincture of opium should be shaken up in a quart of linseed tea and given to the animal three times a day until passages are natural. When there is debility, want of appetite, and continuance of watery discharges from the bowels, give a dose of Watkins' Liniment and feed Watkins' Stock Tonic regularly until cured.

DYSENTERY IN YOUNG ANIMALS.

Young calves, lambs or colts may be attacked with dysentery within their first week or two, the disease being very infectious. There are too many causes for the disease to be mentioned here, but they may be summed up in poor feeding and unclean quarters. From 54 to 90 per cent. of the cases are fatal in calves, 80 per cent. in foals, and 66 per cent. in lambs.

The disease may generally be prevented by a systematic use of Watkins' Stock Tonic and careful feeding, always accompanied, of course, by cleanliness, and methods of disinfection, such as cleansing the vagina as soon as signs of calving are noticed. The calf ought to be received on a clean cloth or at least on fresh litter. Immediately after birth, the cord should be tied with a strong, clean string, making the tie two or three inches below the abdomen and cutting the cord one-half inch below that.

FOUNDER—Laminitis.

Causes. Founder or laminitis may be caused by over-feeding, over heating, or by driving long distances over rough, stony soil.

Symptoms. Animal lies down. Feet unnaturally hot and tender, sometimes swelled; breathing quickened.

Treatment. Cold packs to the feet, or if the animal can be made to stand in a running stream of water, having a soft bottom, it will relieve the inflammation. To restore normal functions feed Watkins' Stock Tonic twice a day, three tablespoonfuls at a time.

GARGET. (Inflammation of the Udder, Mammitis, Mastitis.)

Causes. Injury to the udder from kicks or blows, and even the punching of the calf, are claimed to cause this disease. Another cause is improper milking, some of the milk being allowed to remain in the udder where it becomes infected. Heavy milkers are most frequently attacked, but any cow may be.

Symptoms. The bag becomes swollen, feverish, painful and red with congested blood. The milk flow is reduced and becomes lumpy or watery and even bloody.

Treatment. Cows that are heavy milkers should be milked not less than four times a day for a while after calving. Don't moisten the teats with milk before milking. Provide clean stables and clean bedding. Cleanliness is the best preventive. Give the cow an abundance of fresh, cool water. Rub the affected part with Watkins' Barb Wire Embrocation. A simple treatment is to apply water as hot as can be borne, at frequent intervals, followed by Watkins' Petro-Carbo Salve. Empty the teats frequently by hand or with a milk tube.

INFLAMMATION OF THE KIDNEYS. Nephritis.

Causes. Irritant and diuretic plants; exposure to cold and wet;

presence of stone or gravel in the kidneys; injuries to back and loins; drinking of alkaline water; or of that containing bacteria or their products, etc.

Symptoms. In violent cases, high fever; increase of temperature to 103 degrees Fahrenheit, and upward, hurried breathing, with catchy inspiration; dry, hot muzzle; burning at the roots of the horns and ears; loss of appetite, suspended ruminations and indications of extreme sensitiveness in loins.

Treatment. Remove the cause if possible. Acrid and diuretic plants in the food must be removed. Give a moderate dose of castor oil to remove what remains in the bowels. Patient must be kept in narrow stall, in which it cannot even turn its head, in a warm, dry building, with warm blankets. The acute fever may be checked by fifteen drops of tincture of aconite every four hours, or by one-third ounce of acetanilid. Give pure warm water to drink and feed Watkins' Stock Tonic to act directly on the kidneys, to tone up the whole system and improve the health generally.

MANGE.

Mange is a contagious affection of the skin attacking horses and cattle. It is contracted by close contact, by horses using the same hitching posts, in stalls in towns, by using the same harness, by the attendant using the same curry comb and brush and by carrying the parasites on the hands.

Mange in cattle is usually observed first about the root of the tail and on the thighs. The parts should be thoroughly washed with pure soap and water, and then follow with a treatment of Watkins' Stock Dip, which will be pretty sure to result in a speedy cure.

MILK FEVER.

Causes. Fatness coupled with high lacteal development is a predisposing cause. Jerseys, Guernseys, Holsteins or Ayreshires are much more susceptible than the Angus, Hereford or Shorthorn. Milk fever usually makes its appearance after a comparatively easy and quick delivery, in from twelve to seventy hours.

Symptoms. The first symptoms of excitement usually pass unnoticed; when observed they are those of restlessness, stamping of the feet, throwing the head, wild appearance of the eyes with dilated pupils, and bellowing. The calf, if still present in the stable or lot, is frequently made the object of attack. These symptoms rapidly give way to muscular weakness. The animal staggers, loses power of standing, falls to the ground. Efforts to rise become less and less effectual, unconsciousness soon follows, from which she never rallies; or else recovers as quickly as the attack made its appearance, and on the second or third day is apparently none the worse for her experience.

Treatment. The oxygen treatment is the best method known. It is not difficult to give but, unless the owner has the necessary appliances and has given treatment before, we recommend his sending for a veterinarian.

TUBERCULOSIS.

Tuberculosis is both infectious and contagious and is known as Consumption, Wasting Disease and Pearl Disease. It affects cattle,

hogs, sheep, horses and most every other animal.

It is not advisable to treat affected animals. The efforts should be to prevent the disease by separating the healthy animals from the sick by means of the Tuberculean Test.

Sanitary quarters should be provided for the animals with plenty of light and air.

SORE MOUTH OF CATTLE.

Cattle of all ages before four months are likely to be affected. The disease is not contagious, developing in pastures allowed to go for some time without being used. It is of rare occurrence in pastures used in crop rotation.

Affected animals should be kept by themselves. The disease yields to a stringent antiseptic treatment with Watkins' Stock Dip.

VERMINOUS BRONCHITIS.

Also called Lung Worms, Hoose Husk, Paper Skin, and Whooping Cough

Attacks calves, sheep and swine. This is an affection of the lungs and the disease is spread by the expectorations containing the eggs and germs being deposited upon the food and water and being taken therefrom by other animals who have access to it.

It usually begins as a cough or cold. Give a strong grain diet or milk with bulky food, mixing the food with Watkins' Stock Tonic. Crop rotation is a splendid prevention of this disease.

VERMINOUS PARASITISM.

This attacks all kinds of animals. The flocks should be given a change of pasture and treated with Watkins' Stock Dip.

This disease rarely shows itself where crop rotation is practised.

WARTS.

Warts may be clipped off with knife or scissors. Cut about as deep or a little deeper than the thickness of the skin. After clipping apply once or twice a day Watkins' Petro-Carbo Salve or Watkins' Barb Wire Embrocation

POISONOUS PLANTS

LAUREL (Calico Bush).

Sheep and cattle eat the leaves of this shrub in winter or spring when pasturage is short and the animals are hungry for green feed. Cattle show distinct muscular weakness and wobble about as though drunk; the pupils of the eyes are dilated and frequently there is muscular twitching. Give the animal from one to three fluid ounces of whiskey, diluted, every two hours; follow with a purgative of Epsom Salts and raw linseed oil. Do not repeat the purgative under 24 hours. Farmers should cut this shrub down, or better still, grub it up and burn it, thus preventing cattle and sheep from getting it.

RED BUCKEYE.

Red Buckeye is another shrub whose leaves are poisonous. The symptoms are very like those of poisoning from the laurel and treatment is about the same. The leaves are said to be most poisonous just before or about the time of flowering.

WILD CHERRY, CHOKE CHERRY, PEACH AND SORGHUM.

Wild Cherry, Choke Cherry, Peach and Sorghum frequently cause poisoning of cattle. If enough of the leaves have been eaten death may result. The prominent symptoms are a partial or complete paralysis of the muscles and nerves of the limbs, drowsiness, staggering gait and frothing at the mouth. Frequently the action of the poison is so quick there is no time to give antidotes or treatment. Where this can be done, administer one to four ounces of brandy or whiskey. If the animal cannot swallow, give the liquid hypodermically and stimulate respiration by holding diluted ammonia to the nose. As soon as the animal can swallow, give a quart of melted lard, not too hot, or raw linseed oil and syrup diluted with water. Do not repeat purgative under 24 hours. If sheep and calves have been poisoned, give the same treatment but with doses about one quarter as large.

JOHNSON GRASS.

Johnson Grass frequently causes poisoning of cattle, the symptoms being those of acute indigestion.

POKE WEED.

Poke weed is considered poisonous for cattle, producing usually a high fever and irritation of the nose and throat. Raw linseed oil is the best remedy for this poison.

WATKINS' LINIMENT

ESPECIALLY valuable in treatment of barb-wire wounds, scratches, sprains, cuts, etc., etc. In cases of colic it is a sure cure. Do not run the risk of losing a valuable animal when by having a bottle of Watkins' Liniment on hand you can surely save him. Keep it always about the stable. Watkins' Liniment has been manufactured for more than a generation and has received the endorsement of tens of thousands who have used it, not only for stock, but in the household. It is a purely vegetable remedy and we believe will cure more ailments that man and beast are subject to, than any other preparation. It can be used externally or internally and is penetrating, soothing and healing. Large bottles \$1.00. Be sure that the Watkins agent leaves you a bottle next time he calls. He will allow a free trial to new customers.

Pig Profits



Next in importance to the family cow comes the hog, the mortgage lifter. It may be set down as a general rule that wherever cows are kept hogs should also form part of the live stock on the farm.

Right here we want to say this word, that the hog is not an unclean animal, that it does not enjoy living in filth and filthy surroundings. The trouble is that these are what the hog usually gets and all it gets. Give a hog clean quarters, healthful food and reasonably good care and it will more than repay the expense and trouble you go to in the returns it brings you.

The hog raiser ought to have some definite end in view. Either he ought to raise hogs for lard production or ought to raise bacon hogs. If we were to suggest a choice, we would recommend the bacon hog, because it produces high priced meat for which there is an increasing demand and the prices uniformly bring a generous return for your labor.

We have already said that hog and cattle raising should go together. The general introduction of the hand separator on the farm gives the farmer a large amount of skim milk which is available for feeding purposes.

Fed to the young pig, it will with other feed of Watkins' Stock Tonic, make it ready to be put on sale when from six to eight weeks old. You will find that there is always a sale for small pigs, especially in the spring, at high prices.

You can cull out those you wish to sell at this time and then keep the others until they are six or seven months old, when if they have received good care they ought to dress from 400 pounds up.

The care of hogs is an easy matter, particularly in the summer when pasture and pure water can be had in ample quantities. In the winter time, turnips, cabbage, squash, with a little addition of corn and barley or oats ground to which has been added Watkins' Stock Tonic, make a nearly perfect ration.

Then, some two or three weeks before killing time, cut out the turnips and such food and give a little wheat bran. Surplus skim milk ought also to be fed the breeding sows, small pigs and growing shoats.

Three acres of grass and an acre of rape will feed a carload of pigs thruout a season. Any of the English grasses are all right, though clover is perhaps the best. If the season is favorable so that grass grows too rapidly, turn in extra stock to keep it down, removing when fed off sufficiently.

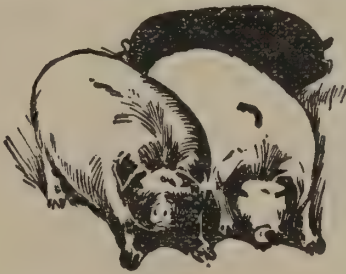
It is better to have the acre of rape at one side and divided so that the pigs can feed off the two halves alternately. This will enable one part to grow while the other is being used for feed. Changing the hogs from one side to the other about every ten days will keep this grass in about the right

condition. Rape is one of the grasses that should be left out of the feed some two or three weeks before killing time.

Let the pasture be well drained and free from mud holes and wallows. Have a trough, and clean, running water, and a shallow tank set on a plank platform onto which the hogs can step easily and cool off. This tank arrangement should preferably be located beside a fence so that the waste water can escape and run out of the pasture in which the pigs are watered.

Before turning pigs into pasture, put rings in their noses and in this way you will preserve a perfect pasture during the season. If on the other hand the hogs are turned into land that is desired to bring in to tillage, rings will not be necessary. One hundred eight weeks old pigs can do many things to a piece of stump land in the way of getting it ready for tillage in a very short time.

For successful hog raising good shelter is indispensable. A perfect shelter provides protection overhead and comfort underfoot. Clean, white sand is good for summer bedding though a sprinkling of straw should be added in cold weather.



Have the shelter open to the south where it will get the sun's rays. The roof should be water-proof and pitched so as to drain the water outside of the lock. In this way you will avoid mud holes in front of the shelter.

The shelter need not be expensive; in general allow about eight feet in depth and an average of two feet for every hog if you have only a few, while if you have fifty or more the amount may be less. A 70-foot shed is large enough for fifty hogs.

Troughs for feeding slop should be provided. Cast iron troughs are, of course, better than wooden ones as they will keep longer and can be cleaned more thoroughly. These troughs should be placed on a platform so as to avoid mud holes due to slop or water being spilled while feeding.

During the summer give your pigs as much variety of range as possible, furnishing them with a trough themselves, where they can consume plenty of skim milk and slop. Old corn should be fed them allowing about one quart to every fifteen pigs.

Keep only your good natured pigs. If the sow shows ill nature at farrowing time, take her pigs from her as fast as they are born to some dry, warm receptacle. Let them remain there until the sow will take them good naturedly. This will generally be after two or three are born, but may not be until she is through, and rarely in three or four days. If a sow is cross two litters in succession, dispose of her and do not even keep her pigs for breeders.

The perfect mother bunches the little pigs in a remote corner of the pen and then settles herself comfortably a few feet away. Such litters are to be prized and the pigs are well worth saving for breeders.

A good sow will produce good litters up to five years of age and frequently longer. A good boar is harder to obtain than a good sow. A boar is fitted for service at eight months old and a sow can produce her first litter when twelve months old.

By keeping close watch of sanitation, the hogs ought to be in healthy condition. Do not compel the pigs to lie in wet, muddy nests over night. Never let an animal get chilled.

Most to be dreaded of all diseases is hog cholera. If it does occur be-

gin infection at once, as the disease is both infectious and contagious. Feed charred corn and charcoal. Keep plenty of coal ashes in the pen or pasture all the time. Move the well hogs into fresh lots where they cannot reach the sick ones. If others take sick move the well ones again. It will do little good to move the sick ones as the remaining well ones would still be open to attack from the disease in the infected pen.

Do not let the hogs take water from a stream when the disease is known to be on farms above them.

Plenty of green food with fresh clean water during the summer will afford splendid protection against cholera.

Small pigs three weeks old or thereabouts are subject to looseness of the bowels, but no trouble will likely follow unless it becomes severe enough to affect the pigs' physical condition.

If pigs are promptly changed to clean quarters, the loss is not likely to amount to much.

Do not allow young pigs to take any filthy matter into the stomach.

Open air, sunlight, fresh sod and Watkins' Stock Tonic are four elements of success in pig raising.

Cornmeal and separator skim milk is an excellent fattening ration. Cornmeal is better and judged by results cheaper than middlings.

Grain and pasture give the best feeding results.

DISEASES OF THE HOG

ANTHRAX.

When anthrax has once been introduced into a locality, it tends to remain there for years and will break out wherever conditions are favorable. The germs of this disease are frequently carried on the hides, wools, hoofs and horns, of other cattle. Preventive protections are all that are necessary. Hogs should not be allowed to feed on the carcasses of animals that have died of Anthrax and no serious loss will occur if the dead animals are disposed of in the proper manner.

BLIND STAGGERS.

Are caused by weakened condition of the blood but more frequently from parasites. When due to the latter the hog turns to the side on which the parasite lies and should be given nourishing food.

COLDS.

Colds may result from the same causes in hogs as in the human family. Exposure to cold and rain, overcrowding in pens, are the most common causes. Generally a hog will recover without treatment. In case it does not, feed warm slop for a few days and administer castor oil or some other laxative. Colds frequently develop into sore throat and the disease may attack either the larynx or the tonsils. The sick hog should be isolated from the healthy ones and given clean, dry, comfortable quarters. Sloppy foods should be fed and in cold weather it is best to feed it warm. Add a small quantity of Watkins' Stock Tonic. Watkins' Liniment could be applied to the throat and usually no other treatment will be necessary.

DEPRAVED APPETITE.

Is usually due to faulty rations with their consequent digestive and nervous disorders. Lack of exercise may also cause it. The hog

shows inclination to eat earth, sand, rock and wood and all sorts of indigestible substances. They are quarrelsome and may attack one of their number. A sow may eat her young. The treatment is chiefly preventive. Supply whatever food elements are wanting. Hogs fed Watkins' Stock Tonic seldom show depraved appetites. The addition of charcoal, salt, wood, ashes and such substances is sometimes a good way of treating this disease.

DISEASED TEETH.

The hog eats all sorts of objects, cracks nuts, coal, gravel and other hard substances, so that it is not surprising that they suffer from diseased teeth. The symptoms are evidenced and when holding the head to one side while eating and inability to shell corn from the ear, such hogs should be given largely grain or sloppy food and pasture, and cut off with a dentist's cutter all tusks. The method followed by some people of knocking out tusks with a punch or cold chisel is inhuman and always certain to crack the teeth and fracture the jaw.

HOG CHOLERA AND SWINE PLAGUE.

These are the great infectious swine diseases. The course of these diseases is from two to five days.



Cholera is fatal to pigs but older hogs often make recovery.

Swine Plague on the other hand is particularly liable to affect the grown hogs while the pigs escape.

Cleanliness is the best means of prevention. See that the hogs are given clean, pure water, clean quarters and clean food, and fed regularly with

Watkins' Stock Tonic and pens disinfected with Watkins' Stock Dip.

HOG LOUSE.

Hogs are not generally troubled with these parasites, as by rubbing against the sides of the pen and against one another they are usually able to dislodge these pests. If not they should be treated with Watkins' Stock dip. Watkins' Stock Dip is absolutely the best dip on the market and should be used freely for this great trouble. Pigs that are not kept in a thrifty condition, however, may be attacked in formidable numbers by hog louse. Spraying should be repeated three or four times at intervals of a week. Always do this in the evenings so that by the following morning the oil is evaporated and there is no danger of the sun blistering the skin.

INDIGESTION.

This may be acute or chronic. Acute is generally caused by overloading the stomach and spoiled foods. Some people seem to think that a hog can eat anything and give them dish water, which contains alkaline soaps or washing powders. Acute indigestion if left uncared for will result in the disease becoming chronic. Give plenty of salt and charcoal, a well-planned, easily digested ration and Watkins' Stock Tonic. If the disease is very severe it is well to give some medicine that will cause vomiting.

INTERNAL PARASITES.

There are several varieties of worms that thrive on the internal organs of the hog. These are known as common round worm, thorny headed worm, pin worm, whip worm, kidney worm and lung worm.

Except the last two these can nearly always be gotten rid of by giving castor oil, calomel or some other physic in connection with a large dose of Watkins' Stock Tonic. The best results are gotten when the pigs are starved for about twelve hours before given the medicine. Preventive treatment is the best method of protection against kidney worms. When once they infect a hog, treatment should be by such drugs as act on and are eliminated by the kidney. The lung worm causes the hog to suffer from a disease to similar whooping cough. Medicine is of little avail. The best results can be obtained by feeding highly nutritious rations with large doses of Watkins' Stock Tonic. As a pig becomes older it will have the necessary strength and resistance to overcome the disease.

POISONING.

Cottonseed. Fatal results frequently follow feeding of cottonseed in whatever form it is given. The cause of the trouble is unknown. In the majority of cases animals are found dead ten or twelve hours after they have apparently been in the best of health. If cottonseed is used as a food and you desire to avoid poisoning, do not feed it to hogs more than two weeks at a time.

Ergot Poisoning. Ergot is a fungus that grows principally on the rye. Hogs may be poisoned fatally by eating the screenings from the thresher or elevator, where the grain has contained quantities of this fungus. The disease has much the appearance of blood poisoning. Gangrene spots show on various parts of the body, the mouth becomes sore and parts of the ears and tail drop off. Cut off the poisoned feed and supply a soft, easily digestible diet, to which a portion of Watkins' Stock Tonic has been added. Give iodide of potash in ten to fifteen grain doses twice daily in the food.

Meat Brine and Washing Sodas are the most common causes of poisoning swine. In both these cases death usually occurs. If hogs have access to salt at all times they will not eat too much, but the meaty taste of meat brine probably adds to their desire for it and they eat so much that inflammation of the stomach follows. When cases of poisoning from brine or washing soda occur, the hog should be given all the water it can drink. Follow with large doses of linseed oil. If the hog seems to suffer intense pain a teaspoon of laudanum can be given.

Wheat and Barley. Wheat and barley may often cause sickness and death. Plugs of beards may lodge in the mucous membrane causing irritation and inflammation. Cocklebur also frequently causes trouble. It is commonly supposed that cockleburs are poisonous, but experiments seem to show that the causes of death are due to horny prickles on the burs which irritate the walls of the stomach, which terminates in death.

SPASMS.

Intestinal worms are probably the commonest cause of spasms in young pigs. It may also occur as the result of cutting teeth. There is danger of a pig dying in an attack, or it may be attacked by other pigs during the season and killed. The spasms may frequently be stopped by throwing cold water on the pig's head, or if it can be done by immersing the whole body in warm water.

SORE FEET.

If hogs are kept continually on hard floors or driven over hard,

rough roads the feet may become inflamed and bruised. Standing in filth may also cause the feet to become sore, the moisture causing the softening of the tissues so that the hog goes quite lame. If the hogs are especially heavy they may lie down most of the time. If hard floors are the cause, turning them out on the pasture will affect a cure. If the pens and sheds are filthy, change the hogs to clean, dry pens and wash the feet once a day with Watkins' Stock Dip. It is necessary that the hogs be kept in a clean, dry place.

SORE TAILS.

The causes of sore tails and tails dropping off are, cold, filth and injury. When young a tail may become injured by the mother stepping on it. Preventive treatment is always effective. Clean up the pens and use Watkins' Stock Dip freely. The loss of a tail is of little consequence to the ordinary hog but for those to be sold as breeders or for other purposes, it becomes a blemish.

SORE MOUTH.

The causes are decomposed slops and impure water, while it might be caused by decayed teeth, or irritation from beards of grasses, such as barley or wheat. If due to irritating foods the cause must be removed and while the animal is sick hard food should be withheld. Place plenty of cool, clear water where the hog can drink. Wash the mouth twice a day with Watkins' Stock Dip.

SUN STROKE.

If kept in a pasture unprovided with shade, hogs may suffer severely from the sun's heat and death generally follows. Do not attempt to drive hogs on a very hot day, but if this becomes necessary, frequent wetting will help them keep cool. The hog pasture should be provided with some shade. If overcome by heat, move the hog to a shady place and pour cold water on the head, but not on the body.

THUMPS.

The cause is often of some digestive order, especially overloading of the stomach and lack of exercise. A jerking movement of the flank is very noticeable when the pig is standing and this is accompanied by a sound which can be heard at some distance. The course of the disease is from a few days to several weeks and the effect is frequently to stunt the growth. Exercise alone will generally affect a cure. If treatment is resorted to from three to fifteen drops of tincture of opium given in a little oil every three or four hours will effect relief.

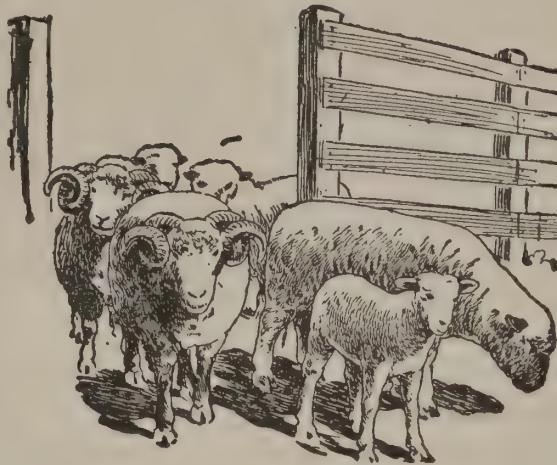
TRICHINOSIS.

From one to three per cent of pork contains trichina. Hogs should be fed grain. If the symptoms of the disease are marked so that a correct diagnosis can be made, all that can be done is to destroy the animal, as this disease can be communicated to man with fatal results, and pork when used as food should be thoroughly cooked or well cured. The parasite cannot survive the proper cooking or curing of the meat.

TUBERCULOSIS

Is increasing in hogs and all possible precautions against infecting the herd should be taken. Keep the pens in the best condition possible. Disinfect thoroughly with Watkins' Stock Dip.

Feed healthy foods and give a good supply of Watkins' Stock Tonic. If there is tuberculosis in your dairy herd, do not feed the skim milk to your hogs. When a hog has tuberculosis it should be destroyed.



SHEEP AND THEIR KEEP

The care and feeding of sheep is one of the oldest industries of man, and one of the most profitable. The ancients of the old world cultivated sheep not only for food but for the fine quality of the wool, and when the early Spanish adventurers undertook the conquest of Peru, they found that there the natives made a wool cloth, vicuna, that rivaled in texture the finest silks and wools, that could be woven so closely as to be almost water-proof.

Although the South American tribes lived in a land of unbounded fertility, yet their flocks of llamas were their most valued possessions. The Inca exercised control and all the flocks were looked after by officers. At certain times there would be a round-up of the herds for shearing of the wool, which would then be portioned among the people so that everyone had all he needed for his own and his family's comfort.

The sheep lives and thrives everywhere. Even in those sections where the rain-fall is small and the pastures are short they prove profitable. They grow to a market age in a few months and that is time enough for them to grow a valuable coat of wool, that more than pays for the care and cost of raising them.

Within the past few years the prices of wool and mutton have gone soaring, a splendid indication of increased demand.

Sheep will keep the land free from weeds and shrubs and they relish to a greater extent than other animals such coarse feed as straw and grain stover. They can be turned out early in the spring and left out late in the fall. After you have gone through your grain field, the sheep can be turned in and they will thrive on the food they find there, clearing up much that cattle will not touch.

Sheep require but little shelter; a shed opening to the south to protect them from the cold winds and giving them plenty of sunshine being all that is necessary. Such a shed should, of course, have rain tight roof to shelter them from driving rains in the summer time and snows in the winter.

From twelve to fifteen sheep can be pastured on an acre of ground. Therefore, every farmer ought to keep at least a small flock and he will have good returns on his investment whether he raises them for wool or mutton.

Sheep are fond of rolling land and usually seek the highest places. In this regard they are very much like the goat. They do not break through fences and are, therefore, easily controlled.

Land on which sheep are kept constantly increases in fertility and, therefore, land that has been worn out for crop growing is a splendid place to turn sheep into.

Finally sheep are usually free from disease and will be entirely so if ordinary care and attention are given them. A good plan is to buy feeding stock in the fall, fit it for market during the winter and sell in the spring, as soon as the weather moderates sufficiently so that the wool can be taken off.

Any of the standard grades of sheep can be raised in this country with profit. It is better to have pure bred sheep, but even if the flocks are of scrub stocks, it is possible to build them up rapidly so that they become money making. Crossing common stock with Shropshire, Cotswold, South-down or Hampshire will give flocks producing fleece and desirable mutton.

Watkins' Stock Tonic should be fed with the grain ration when you are feeding sheep for the market. Always give plenty of water. Lambs mature quickly and should be taught to eat grain as early as possible. Bran, oats, cracked corn or wheat screenings with a small portion of Watkins' Stock Tonic will produce very rapid growth. If lambs have been taught early to eat grain they should be ready to wean when four months old. At this time they should be taken far enough away from their dams so that they cannot hear each other.

Rape makes an excellent pasture for them and is, in fact, a good food for sheep of any age. It is best not to allow sheep at first to remain in the rape field for any length of time. It is better to turn them in for an hour or so and then drive them back to their pasture. The feeding period with sheep and lambs varies from twelve to fifteen weeks at which time the lambs show a gain of 25 to 30 pounds. Older sheep will, of course, not gain so much. At this time Watkins' Stock Tonic should be fed regularly. When it is desired to cheapen the ration, turnips make an excellent feed, their value having been abundantly demonstrated both by experience in Europe and this country.

Sheep should not be turned into pasture where there is much fox-tail, as it is apt to cause irritation of the stomach and result in sore mouth and eyes. When feeding for market the best indication of the value of the ration is the gain in live-weight. At the same price, alfalfa and barley are equal in feeding value to alfalfa and corn. Alfalfa, flaxseed and turnips make a good ration for the farmer feeder who cannot obtain corn and barley cheaply.

THREE IMPORTANT DISEASES

The three most important diseases that sheep suffer from are Sheep Scab, Twist Stomach Worm and the Nodular Disease.

The causes, symptoms and treatment of these three ailments are given under the heading "Diseases of Sheep" in following pages of this book. By reference to these subjects it is easy to see that all three diseases may be prevented by the exercise of a little care.

DIVIDING THE FLOCK

It is good practice to divide your flock, separating the lambs from the ewes. If the wethers are to be fattened they should form the third flock.



At lambing time the shepherd should be in constant attendance day and night, especially if you are raising the mutton breeds.

If twin lambs are born it frequently happens that the ewe gives attention to only the stronger one. It is the duty of the shepherd to see that the weaker one gets a full supply of food. If the young lamb is unable to suckle, it should have help and sometimes it is necessary to catch and hold the ewe for this purpose. Occasionally the ewe refuses to own the lamb. Generally shutting up the ewe alone with the lamb in a small pen for a while is all that is necessary.

In case lambs are brought up on cows' milk, it should be fed 12 to 15 times daily at first, reducing gradually to 5 or 6 times. The milk should be warm before feeding.

When a lamb becomes chilled the best practice is to put it into a pail of water as hot as the elbow will bear, keeping the head out so it can breathe. If the lamb is so cold as to chill the water, repeat the operation two or three times if necessary. As soon as the lamb becomes active, rub dry with a towel and feed. After this it can usually be put back with the flock and will require no further attention.

After lambing the ewe should be fed sparingly on dry foods mixed with a strong quantity of Watkins' Stock Tonic, for two or three days. Lambs should be weaned when they are about four months old, being put on good pasture and given a liberal supply of grain. Watkins' Stock Tonic added to this grain ration will assist the young lambs and keep them in growing condition during this period.

DISEASES OF SHEEP

FOOT ROT.

Foot Rot occurs most often among sheep and cattle kept upon damp, heavy clay soil. It is contagious and while not often causing death, it does interfere with grazing to such an extent as to be a serious handicap in feeding.

Watkins' Stock Dip makes the best treatment.

NODULAR DISEASE.

Causes. This is another ailment due to intestinal worms affecting both sheep and cattle. The nodular stages of the disease of sheep occur mainly during the winter and early spring, but the infection takes place in the summer and fall. As the winter comes on these parasites become insisted in the intestinal walls and the trouble begins.

Symptoms. The symptoms are diminished nutrition, the sheep may stand and grind the teeth for a considerable time, and the final symptoms are those of getting down, attempting to eat, grinding

the teeth, turning the head from one side and frequently pawing with the fore feet until death.

Treatment. When this stage is reached the sheep usually die in two or three days. As soon as the disease is discovered, which will generally be in the fall, supplement dry feed with roots and water and pasture upon rye. This will prove as effective as any treatment. Give nutritious, concentrated foods and lessen the quantity of hay and roughage. Pasturing on rye, wheat or anything green as early as possible will be of great benefit.

SHEEP SCAB.

Cause. Sheep scab, which is also known as scabies and mange, is a contagious affliction. It is contracted by close contact or by sheep coming in contact with the place where the diseased sheep have been. The disease can only be transferred from one place to another by movement of feeding, trade or transportation. For this reason, whenever sheep are brought from a place not known to be free from infection, the animals should be dipped at once in Watkins' Stock Dip.

Symptoms. The first symptoms of the disease are, rubbing or pulling of the wool due to local irritation and itching. A mild form of inflammation may follow, after which a crust or scab forms. Eggs are laid under this crust and these are hatched in a few days, and the young repeating what the ancients have done, the scab is enlarged. If neglected these areas become large and the result is the loss of considerable of the fleece.

TWISTED STOMACH WORM.

Cause. This is a parasite of the fourth stomach affecting both sheep and goats. Infection comes from impure water supply. Lambs are particularly susceptible, the condition in their stomachs being ideal for the development of the worm. This is one of the most destructive diseases of the sheep industry. The lamb shows want of thrift and stands with back arched, grinds the teeth, bleats in a pitiful manner, gets in the shade and out of the way places, and has difficulty in following the flock. The appetite is also perverted. The disease may be so acute that inflammation of the stomach may be set up and death result.

Treatment. Starve the animal twelve hours and give a large-sized dose of Watkins' Stock Tonic. The disease may be avoided by keeping the sheep around pastures that are in crop rotation. Feeding a little cracked corn or chopped oats has a good mechanical effect in expelling worms from the stomach. Another good plan is to place the younger sheep or lambs in the grain field as early as possible.

LIVER ROT.

Causes. Liver Rot arises from the presence of a flat worm in the liver, lungs and abdominal cavity, rarely in the muscles of the sheep. It may also attack other domestic animals.

Symptoms. The symptoms of the disease are not well defined in the sheep. There is usually a redness of the eyes, which is soon followed by paleness and general bloodless condition. The sheep becomes emaciated and respiration is rapid. The mortality from

this disease is high and sheep are more apt to attacks in wet than in dry years.

Treatment. Salt has been found a very effective remedy in killing the parasite in the stage in which they are taken into the stomach and should be liberally given. At the same time the sheep should be fed liberal doses of Watkins' Stock Tonic, as this will keep the animal in the most thrifty condition and better able to resist the attacks of the disease.

MALIGNANT OEDEMA.

Causes. This is a disease common to sheep, horses and other domestic animals and it closely resembles black leg, being sometimes taken for it. The cause of the disease frequently arises from injury to the skin.

Symptoms. Bubbles in the tissues near the point of injury are the first symptoms, these gradually extending to other parts. The disease usually develops within 24 to 48 hours. The disease also occurs at shearing time in consequence of cutting the skin; when it appears under such conditions the shearing pens may become permanently infected.

Treatment. Under such circumstances it is advisable to abandon such pens and build new pens in another locality. The use of Watkins' Stock Dip will be found an excellent preventive of this disease, as well as useful in healing shear cuts.

TICK.

The Sheep Tick is a wingless fly with only its legs differing from the true ticks which have eight legs. When it attacks a flock of sheep it may cause serious loss among the lambs. The greatest danger is in the shearing time, when the ticks migrate from shorn ewes to the lambs. Their presence on the body causes irritation and loss of flesh.

Treatment. Watkins' Stock Dip is the best method of getting rid of these pests. The surest method is to dip the entire flock after shearing. See directions on package.

BOTFLY.

The Botfly is a parasite that attacks sheep and prevents them from attaining proper growth. The eggs are deposited by the adult fly within the nostrils of the sheep. After hatching the larvae penetrate deeply into the nostril cavity, in which they remain until full grown, when they fall to the ground and bury themselves until they immerge as adult flies.

Treatment. Watkins' Stock Dip will be found most efficacious for removing maggots about the nostrils and will prevent flies from laying their eggs in them.



If you are starting a poultry yard we advise the purchase of any of the standard lines of poultry—Wyandottes, Plymouth Rocks, Leghorns—any of them will more than pay for their keep.

For broilers the large sized fowls, such as Wyandottes and Plymouth Rocks are to be preferred. They attain broiler size quickly and the flesh is better and tenderer.

The following table shows the weights of so called “Soft Roaster” chickens at various ages including such varieties as Light Brahmas, the various Plymouth Rocks and White Wyandottes.

4 weeks	old.....	12 ounces	5 months	old	6 pounds
2 months	“	2½ pounds	6	“	7½ “
3	“	4 “	8	“	10 “

Chicks hatched in the spring of the year should be given plenty of sunshine and air. Do not allow them to run in deep, damp grass as this causes them to be chilled and catch cold. Incubator chicks or others which are hatched very early in the season should generally be put in brooders until they are old enough to stand the chilly spring days. Young chicks should be kept off the ground at night. Put a floor in the coop and cover it with haymow sweepings in which is sprinkled some grit and Watkins' Poultry Tonic. Always keep a supply of pure fresh drinking water for the chicks.

It is a splendid rule to let the chicks work for their feed. The exercise they get in scratching in the hay for their feed will give them vigor and prevent their suffering from indigestion.

Dry food is generally better for chicks though if they do not seem to be thriving on this diet a little thoroughly boiled rice or boiled wheat may be given every other day until the chicks are two or three weeks old. Supply plenty of fresh raw vegetable food such as raw potatoes or beets. The help of a hard boiled egg is a splendid food for developing young chicks under two weeks old. Allow one egg for each twenty-five chicks and it can be mixed with some of Watkins' Poultry Tonic.

Chicks should feather out under ordinary weather conditions when from six to eight weeks old.

When chicks are moved into colony coops care should be taken that they are not too crowded. It is better to have a number of portable coops and around this build a run for the chicks. Do not put more than 25 or 30 birds in a flock, and be sure to see that the floor of the coop is covered with cut straw or chaff and keep a liberal supply of Watkins' Poultry Tonic, grit and pure water.

Unless there is some necessity for doing otherwise, birds after they have feathered should be allowed free range.

After the hens begin laying keep a record of the number of eggs each hen lays. If you find the hen is not a good layer mark that bird for the boiling pot the next time you are going to have chicken for your Sunday dinner. Trap nests can be obtained at comparatively little cost and more than pay for the expense.

Poultry bands are extremely useful in keeping a record of the hens. These come in a variety of styles and are very inexpensive.

Some poultry raisers feed laying stock dry food only. The following table for 100 hens has been carefully prepared: Early morning feed four quarts of screened, crushed corn scattered in deep litter. 10 o'clock two quarts each of wheat and oats in the litter.

In the feed troughs keep a constant supply of dry meals mixed together composed of two parts by weight of wheat ground to one each of cornmeal, linseed meal, gluten meal, middlings and beef scraps. In other troughs keep a supply of oyster shells, grit or charcoal.

A hen will eat about 110 pounds of feed in a year; of this amount 90 pounds will be grain, 10 pounds clover and the remaining 10 pounds divided between oyster shells, grit and charcoal. The cost of keeping a laying hen should not exceed \$1.50 and in return for this she should pay from 140 to 150 eggs. A careful estimate shows that it costs about one cent a piece to produce eggs.

Let your poultry houses open to the south where they will get the largest amount of sunshine. See that all cracks are closed so that drafts will not strike the chicks. Building paper is an excellent lining for the poultry house.

It is a good plan to whitewash the poultry house at least once a year. The poultry house should be inspected often to see that it is free from vermin by the use of Watkins' Insect Powder or Watkins' Stock Dip. Put your poultry house on well drained land. Above all avoid dampness in the poultry house.

Broken plaster is an excellent shell making material. It can be pounded with a hammer and then kept in small feed boxes.

In feeding for winter eggs experiments have shown that pullets will endure forcing much better than old hens. Remember that at all times it is the hen given a good amount of exercise that is the best egg producer.

Therefore, it is a good plan always to scatter grain in straw. This compels the hens to scratch for feed and gives them the proper exercise.

When forcing hens or pullets be sure to give them Watkins' Poultry Tonic with their feed ration. In feeding for market, hens should not be given such wide range, as this causes them to lose part of their flesh which they should retain, it being advisable to secure the greatest gain in the least possible time.



The food of fowls should be varied. Feeds may be divided into three classes: Grains or seeds, green plants and animal food. The first includes corn, oats, brewers' grains, etc., while the second includes boiled potatoes and raw cabbage, in the winter; and clover, alfalfa and fresh vegetables in the summer time. Animal feeds comprise meats, scraps, insects, green bone, etc. The most improved feeding methods include all three classes in the daily ration. Watkins' Poultry Tonic will assist the hen to assimilate the greatest portion of food elements from the feed.

POULTRY DISEASES

We have already advised poultry raisers to see that the poultry quarters are kept clean. In this way most of your troubles will be avoided. Other causes are the continuous feeding of too much of one kind or grain or mash feed, impure drinking water, scarcity of green or animal feed in the winter, and allowing the animals to eat too heartily of green grass in the spring. These causes result in indigestion, crop bound and cholera.

Do not force the fowls to roost in crowded quarters. Carelessness on your part in this respect frequently causes the chicks to suffer and die from roup.

APOPLEXY

May be caused by too heavy foods and very little can be done in the way of treatment. By exercising care, however, this disease can be largely prevented. See that the fowls have plenty of exercise and proper food. Watkins' Poultry Tonic will be found a most excellent preparation to give with the daily food to keep the chickens in the best condition.

BLOODY EGGS

Discontinue all except grain foods which should be given in large quantities. This is nature's signature that the hen is not getting enough shell making material in its ration. Do not use egg shells as they may lead to egg eating on the part of the chicks.

CHOLERA

Is swift and fatal in its results and extremely contagious. The cause is generally to be traced to unclean quarters or to drinking stagnant, diseased water. No remedy will prove helpful if these conditions are allowed to remain. Use Watkins' Stock Dip thoroughly. The chickens that die should be burned and the remains buried away from the poultry yard. Cholera is frequently brought into a flock by the introduction of new birds. When buying additional birds it is well to keep them separate from the old flock for a couple of weeks until they become thoroughly acclimated.

CROP BOUND

Improper feeding is the cause, too much grain having been given the fowls which forms into a hard ball and cannot pass out of the crop. The contents ferment and unless the bird is relieved it will literally starve to death with a full crop.

Pour a few drops of castor oil or sweet oil into the fowl's mouth and force it to swallow, then press the contents of the crop; endeavor to loosen up a small quantity of the contents and pass it out through the mouth. Supply more oil from time to time so that the process may be repeated until the crop is emptied, then give the fowl some drinking water in which two or three grains of baking soda have been dissolved. Do not feed anything for a day or two, after which give some dry feed to which Watkins' Poultry Tonic has been added.

DOUBLE YOLKED EGGS

There is nothing to worry about if a double yolked egg is laid even though this is an unusual condition. Double yolked eggs should, however, never be put in incubators.

EGG BOUND

Old fowls are usually victims of this disease which is largely the result of improper feeding. Do not give any fat producing foods but let the diet be largely grain stuff to which Watkins' Poultry Tonic has been added, this will generally be found to give a decided relief. In more serious cases a little sweet oil will be found beneficial.

EGG EATING

Fowls that are properly fed and cared for are not apt to develop this habit. The cause is found in failure to provide sufficient shell making food. The habit should be broken up speedily or it will spread to other birds in your flock. One method of effecting a cure is to blow out the contents of an egg and then fill it up with soft soap. Close up the ends and put it in the nest where the fowls can get at it. This repeated two or three times will usually cause the birds to discontinue the habit. Another method is to pare the upper beak until it is nearly ready to bleed then put china eggs in the nest. We prefer the former method as it is less cruel. If the beak is pared the bird should be given soft food until the bill grows out again. When feeding soft foods be particular to use a good quantity of Watkins' Poultry Tonic as this will prevent indigestion and similar troubles that frequently arise from using large quantities of soft food. Of course as soon as this egg eating habit is discovered you should at once provide oyster shells, mortar, cut bone or similar shell making material.

FEATHER EATING

If plenty of free range is given your fowls they are not apt to develop this habit which is caused nearly always by the chickens desiring more meat or animal food.

FROSTED COMBS

If the comb has become black there is no remedy. As soon as it has been seen that the comb is frosted draw the frost from the comb by applying snow, if it can be had, or extremely cold water. As soon as the frost is out anoint with Watkins' Petro Carbo Salve. If you have done your work carefully you can probably save the comb or at most only the tip will be darkened.

GAPES

This is a parasite that lodges in the wind pipe generally of little chicks and occasionally in adult fowls. They vary in size from $\frac{1}{8}$ to $\frac{1}{2}$ inch in length. They rapidly increase in number and finally the obstruction in the wind pipe becomes so great that the chick is strangled to death. The first symptoms of this disease are very much like those of bronchitis or pneumonia, the difference being that in these latter diseases there is a rise in temperature which is not true of the early stages of gapes.

As soon as you discover the disease separate the fowls, providing clean, dry quarters for the sick birds and disinfect the old quarters with Watkins' Stock Dip. Scientists have found that gapes is frequently introduced by earth worms and it would be a good idea to move the fowls sometimes to other quarters. As a preventive nothing can be better than to keep the poultry houses thoroughly clean and to use Watkins' Poultry Tonic with the daily ration.



INDIGESTION

There are a number of ailments that can all be covered under this heading. These ailments differ from cholera being much less serious, however, if they are allowed to run without attention they will cause considerable fatality among your flocks, and conditions will be brought about that may make the chickens easy victims of cholera. Carelessness in feeding is generally the cause of all difficulties of this nature. The chickens should be given a variety of food.

Indigestion may also be caused by too liberal feeding of corn or other highly carbonaceous food. It may also come through failure to give a proper quantity of grit which is a vital necessity for thrifty poultry. There are other causes which may easily be prevented and which a careful poultryman could prevent. These are feeding sour and decayed food, allowing the chickens to drink stagnant water. Cold damp quarters are almost certain to cause indigestion. Give Watkins' Poultry Tonic with the daily food and your poultry is not likely to have very much trouble from indigestion.

When poultry do not appear to be in a thriving condition and you fear the birds may be suffering from indigestion it is well to examine them carefully and make sure that they are not troubled with lice which multiply rapidly and sap the chickens' vitality. Keep Watkins' Insect Powder and Watkins' Stock Dip on hand for frequent use.

LICE

Are responsible for more poultry being out of condition than any other cause or perhaps of all other causes put together. If your hens are not doing well the first thing to do is to make sure that they and their quarters are free from lice. Having done this then you may look to see if they are suffering from any illness. A chicken may pick up lice running around the barn yard or in hundreds of other different ways and the successful poultrymen must always be on guard against them.

Little chicks are frequently attacked by head lice which fasten themselves on the heads and throats of the young birds. Thousands of young chicks die from this cause and no other. If the young chicks have been hatched in the nests they should be examined as soon as they begin to run about as the head lice will leave the hen and attack the young chicks. If the chicks have been hatched in the incubator they are not so likely to be attacked with head lice unless the machine is an old one and is not free from them. Head lice suck the chick's blood and rob it of vitality necessary to its life.

Body lice live among the feathers and cause irritation that prevents the flock being in the best condition. Watkins' Insect Powder will be found a most excellent remedy and should always be found in every well kept poultry yard.

Under this same heading we may consider mites which are even a worse foe to poultry than lice. They attack at night after they have gone to roost in the poultry house forsaking them in the morning and retreating to cracks and crevices in the sides of the hen house where they rest until night time. Mites bite or burrow through the skin and suck the fowl's blood making rest impossible and, of course, sapping the bird's vitality. In order to guard against these it is necessary to inspect the hen house and to see that it is kept clean. Watkins' Stock Dip is a certain exterminator of this pest and will

enable you to keep the quarters in a clean sanitary condition. In addition to using Watkins' Stock Dip you should provide your fowls a dust bath letting it be clean fresh earth. Into this add a liberal quantity of Watkins' Insect Powder. Chickens are very fond of the dust bath and it is nature's way to enable them to keep themselves free from vermin. We recommend the use of Watkins' Insect Powder freely where there are laying and setting hens.

MOULTING

This is nature's method of enabling the fowl to renew its gown by getting rid of all the feathers that become worn or broken. Poultrymen are not agreed on the best method of treatment of the fowls at this trying period. Moulting can be shortened by discontinuing feeding for a week or ten days as this causes the feathers to be dropped quickly and then after the feathers have been dropped to begin heavy feeding especially with animal foods and those high in protein. A better plan we think is to lighten the food, giving, however, a liberal supply of green food in which Watkins' Poultry Tonic has been mixed. Green food should be put in the litter and the fowls made to work for it. Linseed meal and animal food such as beef scraps should be kept before the fowls after the feathers begin to come in. Special care must be exercised at this time to see that the poultry is free from lice.

ROUP

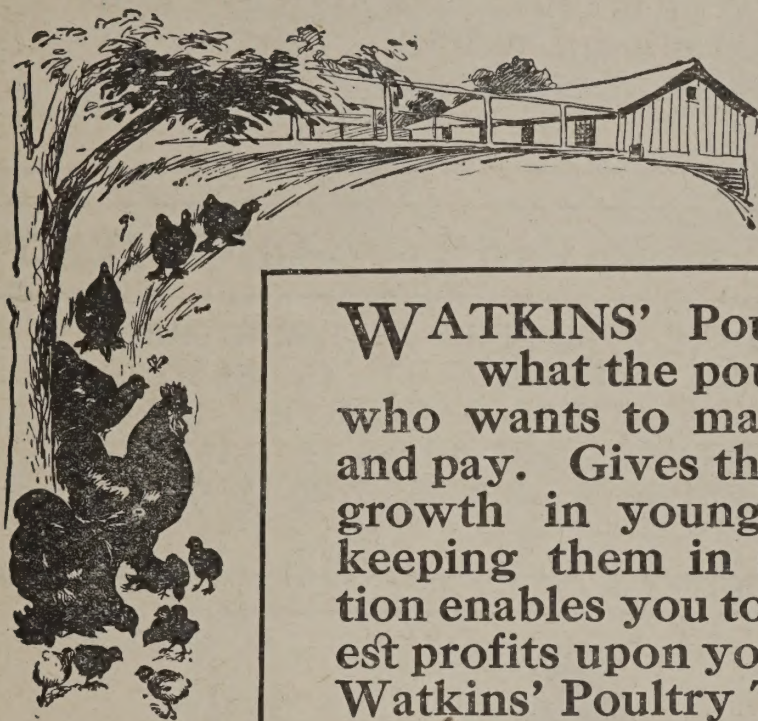
Is the result of colds and it may occur at any season of the year though most commonly met with during the fall and winter months and early spring. The disease is infectious and germs may be carried by the wind. When the attack first appears it may be noticed by the sneezing or gasping of the chick which frequently rubs its head on its plumage. The bird suffers from a loss of appetite and mopes in some dark corner. A watery matter is discharged from the corner of the eyes and mouth and throat fill with matter. The comb turns black and there is a high fever. Remove the sick birds to clean dry quarters and disinfect the old quarters, and the quarters of those birds not infected should be thoroughly cleansed with Watkins' Stock Dip. In this as in all other diseases prevention is better than cure and if our directions as to sanitary quarters for your chicks and the proper feeding of Watkins' Poultry Tonic have been followed you are not very likely to suffer from this dread disease, but if it should attack your flock, use Watkins' Liniment, inserting a few drops in the throat.

Catarrh, Diphtheria, Pip, Canker, Consumption, Bronchitis, Congestion of the Lungs may all be considered under one head. They all start from colds the same as roup and the general source of treatment is about the same.

SCALY LEG

Is caused by a small insect which burrows into and under the scaly covering of the feet and legs of the fowl. It is contagious and fowls that have been attacked with this disease should be looked after. Wash the toes and legs with soap and water and then cover with Watkins' Petro Carbo Salve.

WATKINS' POULTRY TONIC



WATKINS' Poultry Tonic is what the poultry man needs who wants to make his hens lay and pay. Gives the most vigorous growth in young chicks and by keeping them in a thrifty condition enables you to secure the largest profits upon your poultry yard. Watkins' Poultry Tonic is in daily use in thousands of poultry yards with most beneficial results. It is not a medicine or stimulant, but a genuine tonic that keeps the poultry in a healthy condition.



IT can be used at slight cost while its returns are surprisingly large. It reduces the feed bill and your fowls get more good out of the grain you give them. It insures generous nourishment.

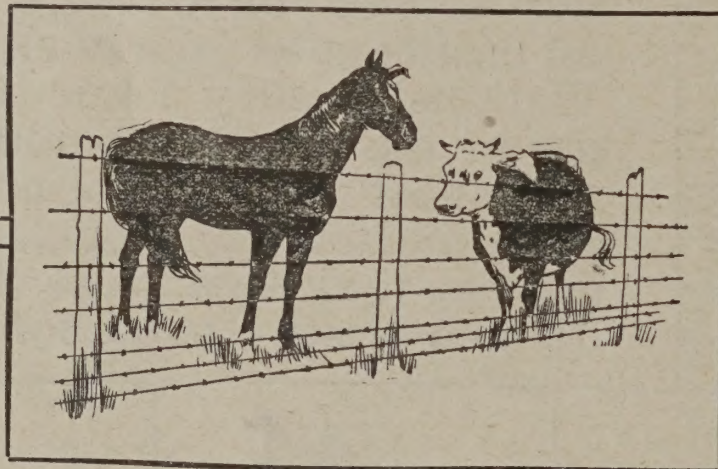
WATKINS' Poultry Tonic is compounded with all the care used in all our other preparations, being made of fresh, pure, strong ingredients that give greater results pound for pound than any of the poultry foods on the market. This comes in 50 cent packages, but is very much cheaper in 15 pound and 30 pound pails. Ask the agent.

WATKINS' PETRO-CARBO SALVE

GOOD FOR ACHES, BURNS, BRUISES, CUTS AND CHAFES, IN FACT FOR ANYTHING FOR WHICH ANY OTHER SALVE IS GOOD. INVALUABLE FOR STOCK, FOR BARB-WIRE WOUNDS, COLLAR OR SADDLE GALLS, RUNNING SORES AND OTHER AILMENTS.

WATKINS' VETERINARY OINTMENT

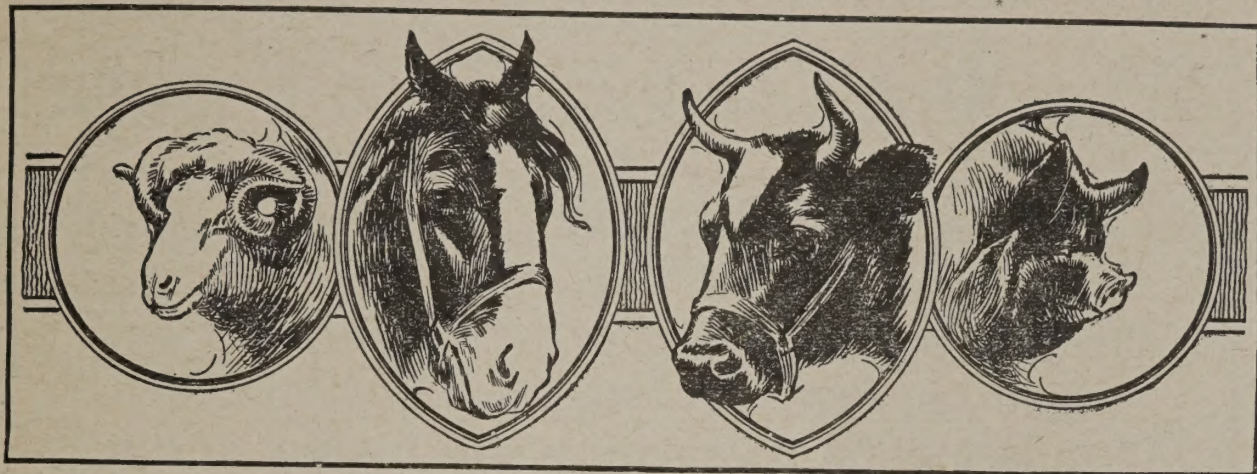
THOUSANDS HAVE USED THIS SPLENDID REMEDY AND THEY DECLARE IT IS BETTER THAN ANYTHING THEY HAVE EVER USED. FOR SORE SHOULDERS AND CUTS IT CANNOT BE BEATEN. PRICE 50 CENTS, FOR A VERY LARGE BOX.

**WATKINS' BARB-WIRE EMBROCATION**

A LIQUID MEDICINE FOR STOCK WOUNDED BY BARB-WIRE AND OTHER CAUSES. JUST THE THING TO CURE RUNNING SORES, STIFF JOINTS, LAMENESS AND OTHER AILMENTS. THOSE WHO HAVE USED IT SPEAK HIGHLY OF IT. PRICE 50 CENTS PER BOTTLE.

WATKINS' VETERINARY LOTION

ONE OF OUR WONDERFUL REMEDIES FOR ALL KINDS OF LIVE STOCK. IT FORMS A FILM OVER THE AFFECTED PART KEEPING OUT ALL IMPURITIES, AND IS VERY SOOTHING AND HEALING. PRICE 50 CENTS PER BOTTLE.



WATKINS' STOCK TONIC

THE horse, the cow, the hog and the sheep are the four livestock corners upon which your success depends. They should be made to produce results for you every hour of their lives, either in work or taking on flesh to fit themselves for market. They are just what you make of them.

YOU can keep your working animals in condition throughout the season, so that you do not lose an hour's time, or you can bring your market stock to condition in the shortest time by using Watkins' Stock Tonic in the daily ration. It is not a food, it is not altogether a medicine, but its use enables you to get the best results from the feed you feed and keeps your stock in such thrifty condition that the use of medicine need but seldom be resorted to.

Read on page two and four of this book the chemical analysis of Watkins' Stock Tonic and the ingredients of this wonderful preparation.

THERE is nothing like it for keeping your stock in work-producing, money-earning condition. Watkins' agents carry a complete line and you can buy a package or pail. The experience of thousands of users warrants us in saying that once you begin to use Watkins' Stock Tonic and note the improved condition of your live stock, you will never be without it.

Why Stock Dipping is so Popular

ANY remedy that will rid stock of lice, mites and disease germs is bound to be very popular with the stock-raiser, and especially so in view of state and governmental requirements, compelling the owner to dip stock before shipping them out of the state. The name "*Watkins*" stands for the best of everything and when applied to

<i>Watkins'</i>	<i>Stock</i>	<i>Dip</i>
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leaves nothing more to be said or desired in the way of quality. Put up in air-tight tin cans. Handy and convenient to use.

A PERFECT GERMICIDE AND DEODORIZER

AN IDEAL ANTISEPTIC

A POWERFUL PURIFIER

A safe, harmless, non-poisonous disinfectant. Invaluable also for household purposes, for disinfecting sinks, sewers, out-houses, sick-rooms, laundries, poultry houses, and pig-pens. The best thing on the market, *and the price is right, too.* Ask our agent for prices in bulk.